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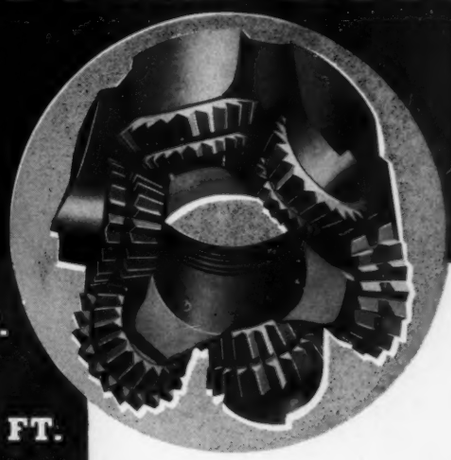

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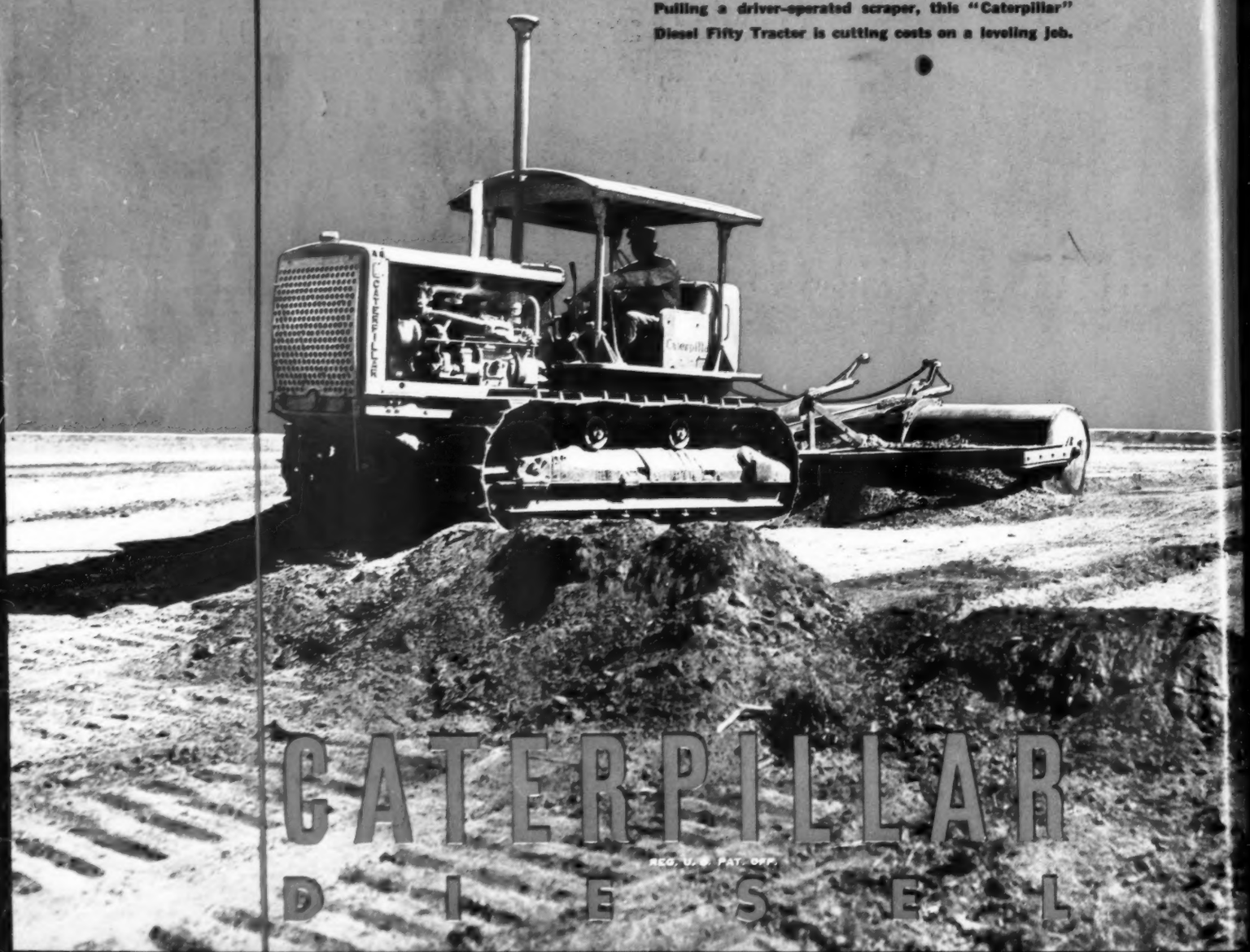

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# These are Great days for Good tools

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Baker Tools are field tested under all conditions. For repairing old wells or preparing new ones for the introduction of casing there are Baker units to help you. You can depend on their safety and efficiency, secure in the knowledge that thousands of operators have successfully done so before you. And when it comes to landing a string of casing quickly and safely—the experienced oil man naturally thinks of Baker Cement Equipment.

*1. Cutaway of a Baker Cement Float Shoe*

*2. Baker Cement Float Collar*

*3. Baker Cement Whirler Shoe*

*1. Baker Cement Float Shoe*

*4. Baker Whirler Cementing Collar with Basket*

*5. Baker Cement Guide Casing Shoe*

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### 2. BAKER CEMENT FLOAT COLLAR

A special floating and cementing collar, or coupling, in which only concrete and a minimum amount of Bakelite are used in constructing the internal plug and back pressure valve mechanism. Many operators prefer to place the principal "float valve" in a collar one or two joints above bottom. The cementing plug used in cementing is thus stopped at the collar; the cement tailings are retained in the casing; and cement of a better consistency is distributed around the casing shoe. This Float Collar has all the floating and cementing efficiency of the Baker Float Shoe.

In deep wells, two cement float collars and a cement guide shoe are often used. However, the combination of a cement float collar and cement float shoe is more generally employed.

### 3. BAKER CEMENT WHIRLER SHOE

A cementing shoe, which also serves the purpose of a casing guide and float. It is identical in design to the Baker Cement Float Shoe, except that a number of side circulation holes lead out from the valve chamber below the valve seat, in addition to the bottom circulation hole.

These holes, or ports, are "baffled" by means of plates set in grooves, which are cut at an upward angle. The greater outlet area, and the manner in which the fluid is diverted and directed around the shoe, insure complete distribution of cement, and minimize "channeling."

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### 4. BAKER WHIRLER CEMENTING COLLAR

Placed in the string between screen pipe and casing, this unit provides the most efficient means of cementing a combination string, or cementing at any depth. The internal plug and double-valve mechanism are constructed entirely of concrete and Bakelite. Side circulation holes, like those in the Cement Whirler Shoe, direct the cement upward around the casing. The basket acts as an outside packer to keep the cement away from the oil sand and to catch any cavings which help in packing off.

### 5. BAKER CEMENT GUIDE CASING SHOE

A plain Texas Pattern (Straight Side) Casing Shoe, is equipped with a Guide made of special formula concrete which is amply strong—provides minimum shrinkage, and yet is not so hard that it cannot be drilled up readily and circulated out of the hole with the drilling fluid.

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## BAKER OIL TOOLS, INC.

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# Oil Production Declines; Three States Fix Their Allowables for New Month

By JAMES McINTYRE

WITH Texas having reduced its oil production 34,825 bbls. per day; Oklahoma 25,175 bbls.; California, 18,000 bbls. and Kansas 7,325 bbls. those states accounted for 85,325 bbls. of the 86,897-bbl. decrease in oil production in the week ending August 3.

The August allowable production in Texas is about 1,003,590 bbls. per day; in Oklahoma, 491,194 bbls. and Kansas, 139,858 bbls., a decided decrease from the quantity of production sanctioned by the Commissions of the three states for July. The action of the commissions has had the hearty approval of most producers anxious to see the present long-continued price structure remain until conditions call for a higher price range.

The Mid-Continent area has recently presented a number of surprises starting with the discovery of big production in the Trinity sand in the Rodessa area, Caddo Parish, Louisiana. It has been demonstrated that underlying the Bromide sands, in the Fitts pool, in Pontotoc County, Oklahoma, are sands in the McLish horizon that appear to be similarly well saturated with oil, which fact has caused the early estimates on per-acre production in that field to be revised upward very materially. Closely following this the Oxford pool in Sumner County, Kansas bursts into new prominence with a 6,000-bbl. well in Simpson Dolomite, which undoubtedly will result in deeper drilling of old wells in that pool, which was opened in 1927 and shared with the Churchill pool the distinction of being among the largest pools discovered in Kansas.

An Oswald Lime pool was opened in the past week in southern Ellis County, Kansas, about 16 miles from any other production.

Another of the past week's discoveries was a pool southeast of the college town of Stillwater, Payne County, Oklahoma, but the discovery well is not a completion and its real worth is yet to be learned.

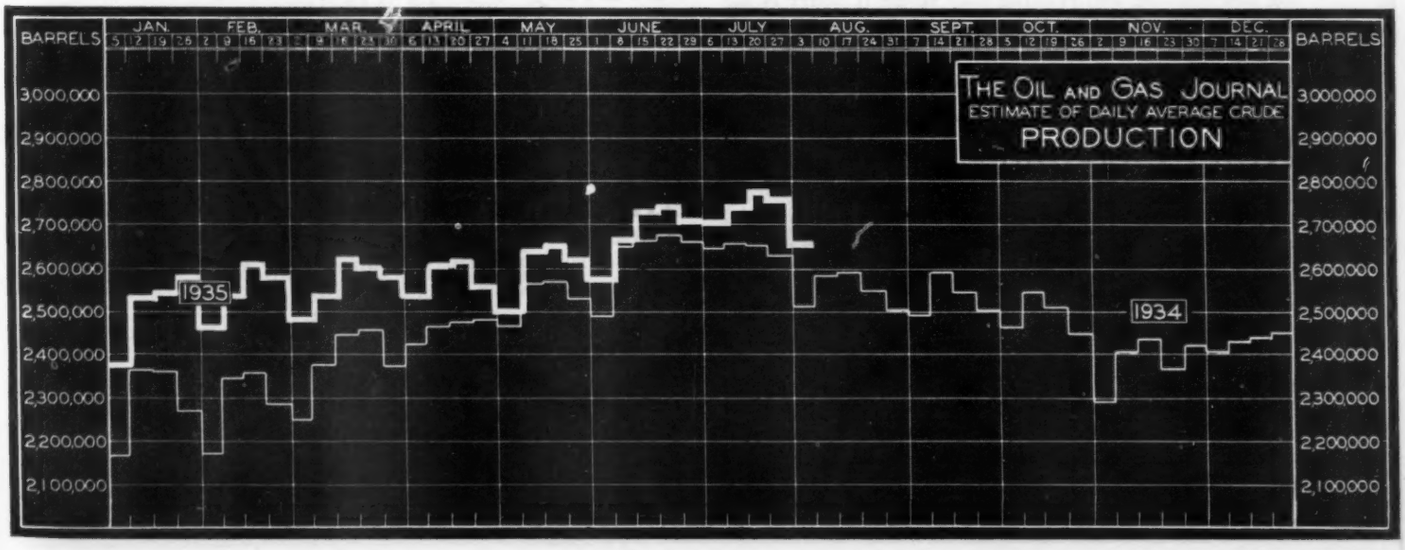
In Acadia Parish, Louisiana, a deep wildcat on its first production test showed a large gas production, but it is believed will develop oil on the next test with screen set low. Southwest Texas developed two new pools in the course of the week, one in western Goliad County and the other 8 miles from Edenburg, Hidalgo County. Neither discovery well had been completed.

Production of Michigan's fields reached a new high level for a month, in July, with a total of 1,365,000 bbls.

## Production 2,659,906, Decrease 86,897

Estimated daily average production for the week ending August 3, a comparison with previous week and one year ago follows:

| | Aug. 3 | July 27 | Aug. 4, 1934 |
|---|---|---|---|
| Oklahoma— | | | |
| Oklahoma City | 136,850 | 152,325 | 96,705 |
| Seminole-St. Louis | 97,500 | 104,025 | 81,520 |
| Remainder of State | 264,425 | 267,600 | 236,955 |
| Total Oklahoma | 498,775 | 523,950 | 415,180 |
| East Texas— | | | |
| Lathrop | 161,966 | 163,328 | 224,660 |
| Kilgore | 152,520 | 156,127 | 163,300 |
| Joiner | 153,337 | 153,622 | 145,690 |
| Total East Texas | 467,823 | 473,077 | 533,650 |
| West Texas | 151,529 | 156,754 | 142,508 |
| North Central Texas | 82,945 | 84,684 | 93,165 |
| Texas Panhandle | 51,923 | 61,827 | 61,247 |
| East Central Texas | 47,054 | 50,453 | 50,553 |
| Gulf Coast—Texas | 180,454 | 188,783 | 169,510 |
| Southwest Texas | 56,552 | 57,527 | 57,195 |
| Total State of Texas | 1,038,280 | 1,073,105 | 1,107,828 |
| Kansas | 145,725 | 153,050 | 132,160 |
| Louisiana— | | | |
| North Louisiana | 24,790 | 22,630 | 24,405 |
| Gulf Coast—Louisiana | 113,045 | 113,894 | 71,865 |
| Total Louisiana | 137,835 | 136,524 | 96,270 |
| Arkansas | 30,360 | 30,475 | 31,660 |
| Eastern Fields (except Michigan) | 106,000 | 106,000 | 102,000 |
| Michigan | 45,701 | 45,019 | 30,403 |
| Rocky Mountain area | 108,230 | 111,680 | 96,280 |
| California— | | | |
| Santa Fe Springs | 37,500 | 40,500 | 39,000 |
| Long Beach | 75,000 | 75,500 | 65,000 |
| Mountain View | 30,000 | 31,300 | 5,850 |
| Elwood | 15,500 | 16,500 | 12,500 |
| Kettleman Hills | 61,000 | 61,100 | 62,500 |
| Remainder of State | 330,000 | 342,100 | 315,150 |
| Total California | 549,000 | 567,000 | 500,000 |
| Total United States | 2,659,906 | 2,746,803 | 2,511,781 |



# The Bulletin Board

***New Oil Bill*** resulted from White House conference, ratifying interstate compact, making Connally Act permanent, limiting imports, and creating Federal agency to recommend allowables. Provision for legalizing voluntary agreements within industry in controversy. Bill introduced in House.

***Repressuring*** operations require more than a general knowledge of the lease conditions if satisfactory recovery is desired. Many phases of geology, chemistry, physics, physical-chemistry and various engineering methods are needed to be applied to a study of the formations to be repressured in the older fields.

***In California*** engineers have been determining best gas-oil ratio for Playa del Rey field in compliance with court order enjoining waste. Central Committee increases August allowable 27,300 barrels over July, highest since November, 1930.

***Bus and Truck*** regulation bill passed by the House at Washington and sent to conference committee. It is backed by the railroads and is inimical to the oil industry's interest in expansion of highway traffic.

***Oil Field Waters*** contain many forms of impurities which should be removed by proper conditioning of the water before it is used. Corrosive, scale forming and foaming and priming may result if water is not properly treated before it is used.

***Water Flooding*** in the Nowata, Oklahoma, stripper well area is becoming increasingly important and operations are being expanded there. A substantial program of water flooding in the older Kansas fields is also being developed among several companies.

***Voluntary Code*** of marketing practices submitted to the industry by directors of American Petroleum Institute will be presented at meetings of marketers throughout the country beginning next month. C. E. Arnott is in charge of the program.

***East Texas*** investigation by Texas legislative committee marked by tempestuous meeting at which Commissioners Thompson, Terrell and Smith were examined. Fraudulent telegraphic order releasing oil was a feature of the hearing.

***Dickinson Field,*** Galveston County, Texas, looms larger in potentiality following latest completion. May rival Anahuac or Hastings fields.

***Oxidation Properties*** of motor oils may be measured in the laboratory to yield results which compare favorably with those obtained in actual road tests using various kinds of oils.

***Refiners in the*** Mid-Continent will operate at a modestly higher rate during August compared with the previous month, the increased crude runs being justified by a sustained demand for gasoline at a time when stocks have been reduced to comfortably low levels.

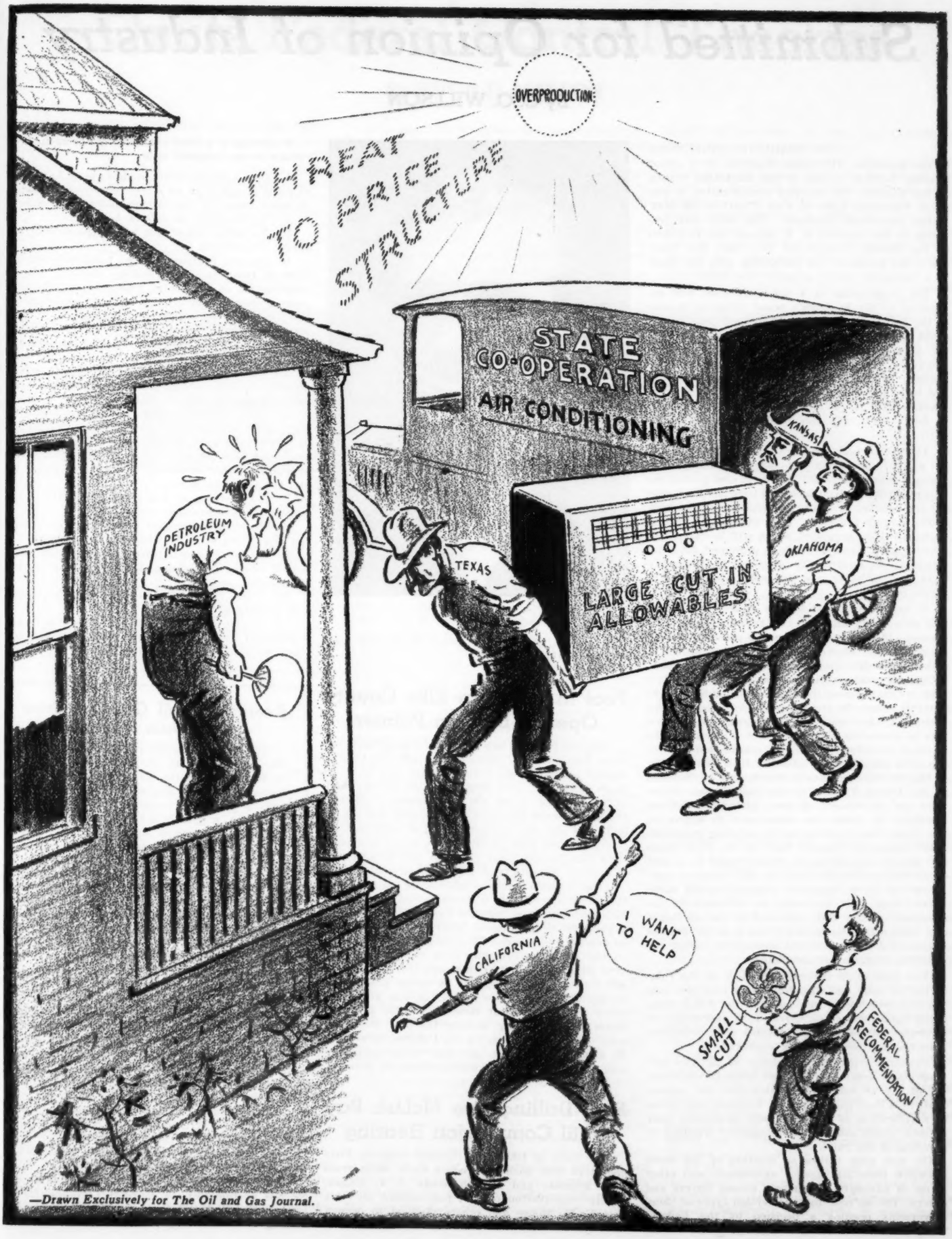
***Overproduction*** in East Texas estimated at 41,000 barrels daily during the past week. Sales of confiscated oil affecting markets within state.

***Gravity*** gathering systems planning in the oil fields is aided by following stream channels. A good example of this type of system is to be found in the Lucien Field, Logan County, Oklahoma.

***High Pressure*** gas lift compressor plant in Kettleman North Dome Field is greatly increased in capacity and efficiency by addition of modern units. New plant in Montebello Field, California, also being built.

***Confiscated*** gasoline tax will be paid by purchasers, Attorney General McCraw of Texas announces, disposing of theory that State might have to bill itself for taxes on seized gasoline it auctioned.

# Real Relief




—Drawn Exclusively for The Oil and Gas Journal.

# Voluntary Marketing Practice Code Submitted for Opinion of Industry

By C. O. WILLSON

THE BOARD OF DIRECTORS of the American Petroleum Institute at a called meeting decided to pass to the marketing branch of the industry for detailed consideration a proposed Voluntary Code of Fair Practices for Marketing Petroleum Products. The code was presented to the board by C. E. Arnott, vice president of the Socony-Vacuum Oil Co., Inc., the Institute's vice president for marketing, who has headed a committee which prepared the draft.

The preparation of a voluntary code was authorized by the Institute's board following demise of the N.R.A. It was thought at that time a code could be perfected which would receive approval of the industry and could be made effective on a voluntary basis through the Federal Trade Commission. Accordingly, a committee, whose members had been active under the oil code and who were familiar with the voluntary code of ethics adopted in June, 1931, was appointed to prepare a new draft.

The action taken by the Institute's directors is not a final approval of the code's provisions. The committee headed by Mr. Arnott is now authorized to present the draft at meetings to be held throughout the country to secure the reaction of the marketing branch generally. It is anticipated certain changes will be suggested which will be taken into consideration when the code is presented for final action to the board. The sectional hearings will start in September and probably will require a month or more.

If finally approved by the directors the code will then be submitted to the Federal Trade Commission. If that body follows the procedure it did with the code of ethics it will hold hearings at which the entire marketing branch can be heard before approval or disapproval of the individual rules which compose the code. It will probably be late fall before the code is ready to present to the Federal Trade Commission. Meanwhile legislation may be passed by Congress which will change the internal organization of the commission. There has been considerable agitation to widen the list of fair practice provisions which may be included in the Group 1 rules of the commission. These rules are enforceable at law. Also more definite standards to guide the commission in approving fair trade practice agreements are being suggested. Other suggested changes have to do with wages and hours of employment which would be a part of the enforceable provisions of any voluntary code. If any of these suggested changes should materialize, they will obviously be reflected in the provisions of any code approved by the oil industry. This legislative action if taken in the present session of Congress should materialize before the sectional hearings are completed.

The code draft incorporates most of the rules of the oil code and also follows in part the code of ethics which with the ending of the N.R.A. nominally again became effective. It is understood no attempts will be made to enforce code provisions until the new code has been approved.

Profiting from the experience of the two previous codes, great care has been taken in the phrasing of the 18 rules which constitute the present draft by a legal subcommittee. Evasions amounting to nullification of previous code provisions were in some cases due to the incomplete wording or phrasing of the rules.

The new code makes no mention of the much discussed lease and agency agreements and other forms of exclusive agreements among buyers and sellers. The oil code forbade certain types of these agreements pending a decision by the Federal Trade Commission on their legality. Other N.R.A. rules which bordered on price fixing are also omitted in the new draft.

C. E. ARNOTT

Following is a brief summary of the main provisions of the proposed code:

1. Prices on petroleum products must be posted at point of sale with no secret concessions, rebates or other forms of concessions under these prices.
2. No discounts on coupon books.
3. No selling below cost for the purpose of injuring competitors.
4. No free equipment to be furnished distributors in connection with storage, display, sale or consumption of petroleum products. Oil burners, pump globes and advertising signs an exception to this rule. Oil companies not to engage in sale of new equipment. Companies have right to install equipment on land owned in fee or held under long lease.
5. Restrictions placed on repair work that can be done by oil companies on equipment used in sale and distribution of products.
6. Oil companies taking over station facilities must paint out identifying colors and trademarks of other companies. Sellers cannot use containers and other distributing equipment identified with products of other companies. This rule is aimed to end the substitution evil.
7. No payment of rentals for advertising on premises where products are sold.
8. No sales solicitation which involves breaking of existing contract with another company.
9. No lotteries and prizes in connection with sale of products. Giving away of maps and tourist information permitted.
10. False claims or deception regarding products forbidden.
11. Credit terms for various classes of sales established and extension of credit in excess of these terms constitutes unfair practice.

## Pool in Southern Ellis County Opened by Tom Palmer

Tom Palmer and associates have discovered another Kansas Pool. Discovering pools has been a regular habit of Tom Palmer in the past year or more. This one is in southern Ellis County and is No. 1 Ruder, C SE NE NW Section 17-15-18w. It found Oswald lime at 3,433 feet, pipe was set at 3,417 feet and pay was penetrated at 3,422-29 feet. It pumped 206 bbls. of oil in 19½ hours, pumping 10.56 bbls. the last hour. The pay will be acidized. It is about 16 miles from any other oil pool.

Closely following the completion of the Amerada Petroleum Corp.'s No. 9 Gassaway in Section 14-32-2e, Oxford Pool, Sumner County, which made a potential production of 5,820 bbls. in 24 hours on Sunday and Monday. The Shell Petroleum Corp. on the adjoining Scoggins lease was in dolomite at a total depth of 2,900 feet and the well flowed 805 bbls. through casing in 24 hours, pinched in during 21 hours of the period. It was given another test in which it flowed 310 bbls in three hours through casing, making 115 bbls. the third hour. The same company's No. 1 Miller, in Section 33, about 4 miles south and west of the Gassaway well, was 3,446 feet deep with a 14-bbl. oil showing.

## Stop Drilling Into McLish Pay Until Commission Hearing

The State of Oklahoma clamped down on Fitts operators who wish to produce their wells from both Bromide and McLish sands. I. A. Dugan, deputy conservation officer, has ordered all tests that E. H. Moore and others planned to deepen into the McLish sands bottomed in the Bromide, and wells already drilled into the McLish pay choked down to a maximum of 75 bbls. per day until a hearing is held. Moore and others have one well in McLish sands good for 1,000 bbls. per hour.

Carter Oil Co. has two new wells in the Fitts Pool, No. 17 Richards, NW SW SE Section 30-2-7, bottomed at 4,120 feet and flowing 736 bbls. the first three hours, and No. 4 J. Smith, SE NE NE Section 31-2-7, flowing 351 bbls. the first two hours, total depth 4,057 feet.

In the Edmond Pool, Amerada Petroleum Corp. and others' No. 3 Suenram, SE NE NE Section 6-13-3w, had Wilcox sand at 6,673-6,720 feet, total depth, and flowed 1,217 bbls. in 21½ hours, 1 per cent mud and 4 per cent salt water.

Arab Petroleum Co. and others' test in C SE SE NW Section 16-17-1e, southern Cleveland County, had Checkerboard lime at 4,750 feet and was drilling below 4,800 feet.

## Average Retail Gasoline Price Shows Gain August 1

The average service station price of regular grade gasoline, exclusive of all taxes, in 50 representative cities throughout the United States on August 1, 1935, was 14.1 cents a gallon, as compared with 14 cents on July 1, a gain of 0.1 cent.

The 50-city price August 1, 1934, was 13.98 cents. The 1935 price thus represents a gain of .12 cent over that of a year ago, and a gain of 1.2 cents since January 1, 1935, when the average composite price was 12.90 cents. The present price is the highest August 1 price since 1930 when the prevailing price for that month was 16.49 cents.

# Oil Bill as Approved at White House Omits Federal Control Theories

By HUGH D. MALLON

AN ENTIRELY NEW OIL BILL, displacing the Thomas control measure, resulted from a conference at the White House attended by Secretary Ickes, Under-Secretary Charles West, Chairman Fahy of the Petroleum Administrative Board, Senator Thomas and Representative Disney of Oklahoma, Chairman Sam Rayburn of the House Committee on Interstate Commerce, and Chairman W. P. Cole of the subcommittee which has been investigating the oil situation.

The main points of the bill are:

Ratification of the interstate compact for crude production control, which has been signed by Texas, Oklahoma, Illinois, Kansas and New Mexico.

Permanent enactment of the Connally act prohibiting the interstate shipment of oil and its products produced in violation of state law, and placing enforcement of the act under the new petroleum board.

Limitation of imports of crude and its products, as maintained under the code.

Recommendation to the states by a new federal fact finding board of the monthly crude demand and each state's allowable to meet this demand.

Approval of trade practice agreements within the industry, such as now being considered by its leaders for substitution for the oil code, and the original code of ethics was also discussed.

There is no mention of federal production control in the bill. The quotas which the new board will be authorized to recommend to the states are merely for the information of the state control agencies, but are expected to be followed, as during the oil code. There is no provision for their enforcement by the federal Government, in event a state exceeds this quota.

The new act would be administered by an independent board of five members to be appointed by the President, and confirmed by the Senate. Each member will receive an annual salary of $12,000 and serve five years.

The Ickes oil administration is out of the picture. The only federal control feature is the Connally act provision. Secretary Ickes did not agree with suggestions for an independent board, and is said to feel the bill gives a jurisdictional slight to the Petroleum Administrative Board, which in the past supervised federal oil regulation.

The legislation was shaped along lines of the bill drafted by the Cole subcommittee. The conference is understood to have been in general agreement that provisions of the Cole bill were the best that may be accomplished this session of Congress.

President Roosevelt is expected to send a message to Congress urging action before adjournment and so certain is the hope for favorable action the Cole bill was whipped into shape, with the expectation that passage may be accomplished within two or three days.

Chairman Cole said there was a minor perfecting amendment to be made in the draft taken to the White House. He said the clarifying amendment would be made in Section 6, the voluntary agreement provision, and would require that where agreements provided for waiving the criminal provisions of the antitrust laws, they must be approved by the President.

It is generally conceded that no controversial provisions contained in any oil bill can be passed before adjournment, and for this reason observers are of the opinion that if any legislation is passed it cannot be any broader than the bill presented to the President, and some are openly doubtful that a bill can pass.

Opposition is being manifested to the powers to be vested in the new petroleum board. It is felt by some that such a board would encourage a continual agitation for further federal legislation.

Periodical determination of the reasonable market demand for production of crude petroleum, breakdowns into the reasonable quantity which each producing state should be allowed to meet the national demand, the amount which should be currently produced and that which should be withdrawn from storage would be set by the board, but the board is given no authority to enforce such determinations. In fact, it is specifically instructed that it shall inform the states, their authority extending no further.

The Cole Committee, reading from left to right: William P. Cole, Jr., chairman; Charles A. Wolverton, Edward A. Kelley, Samuel B. Pettingill, and C. E. Mapes

Voluntary agreements between members of the industry, with a relaxation of the antitrust laws to allow such agreements, may be provided for in the bill, subject to the approval of the President. The new board is instructed to co-operate with the industry in enacting such agreements, when the board finds such agreements avoid waste in the production of oil, or where the orderly development of new pools may be assisted, or refinery allocations, to assure non-integrated refiners an adequate market, may be made, at the same time assuring to such refiners an adequate supply of crude oil, or to assure refiners who are subscribers to such an agreement fair access to the market for such refined products as they may produce.

Any such agreement may be approved by the board when it is found it will accomplish the purposes mentioned and any action taken under such agreement shall be free from the criminal provisions of the antitrust laws if approved by the President. If the board finds that the agreements fail to accomplish any of the purposes set out the board is empowered to nullify the entire agreement. Thus, if it is held out that an agreement will stabilize markets and does not so do, the board is empowered to declare the agreement null and void regardless of what other benefits may be derived from its operation.

The Cole bill was introduced in the House Tuesday by Representative Cole. It is expected the measure will be favorably reported by the House Committee within a day or two, with House action expected almost immediately thereafter.

Senator Thomas has amended the Thomas bill to conform in most of its principles with the bill introduced by Representative Cole. Senator Thomas stated that the differences between his amended bill and the Cole bill have the approval of the President, but his statement could not be confirmed by any other of those who attended the White House oil conference.

The Thomas Bill instead of setting up an independent board to administer its provisions would allow the President to transfer the board to any other governmental agency or department, this provision being construed as giving the board back to the Secretary of the Interior which is frowned upon by numerous members of Congress. The prediction has been made that this would be accepted by the House.

Another change is in the import limitation section which would restrict importations to not exceed the amount imported during the last six months of 1932, the House bill allows the President to restrict the importations when he finds that they interfere with the domestic supply.

A petroleum advisory committee would also be set up under the terms of the Senate bill, the committee to be composed of members of the industry appointed by the President. The committee would make recommendations to the board and perform such other duties as may be delegated to them by the President.

Senator Thomas expects this measure to be considered very soon by the Senate, some reports saying he would attempt to force a vote on it by Thursday. The senator stated he would bring it to a vote at the earliest parcticable moment.

The bus and truck regulatory bill, passed by the House at Washington, has gone to conference between committee members of the House and the Senate which had acted upon the measure earlier.

The holding company bill which has struck a deadlock in the conference committee over the "death sentence" clause will probably bring a compromise in the attitude of the Senate members of the conference committee.

## Ickes Respites Oil Industry Until Arrival of Fall

WASHINGTON, D. C., Aug. 6.—The break in prices and the demoralization of the oil industry which has been predicted by Administrator Ickes and others connected with the Petroleum Administration will not occur until fall when the normal recession in consumption takes place, according to a statement of Secretary Ickes.

Asked whether the Federal Tender Board was functioning, and if that board could handle the situation in Texas, he stated that the board had only limited powers under the Connally act, and that they could not do everything to control the situation, but that they were doing the best that could be expected under the circumstances.

The pressure of hot oil on the price structure, which Mr. Ickes says is already being felt, will cause the break, he claimed. Hot oil production is increasing daily in both Texas and California, he stated, and if continued can result only in demoralization of the industry.

At the present time, without the "support" of the federal Government, he said, prices for crude oil remain stable, while refined products are selling at remarkably even levels, in some instances the price being just a shade above normal.

# Playa del Rey Engineers Determine Gas-Oil Rate

By L. P. STOCKMAN

ENGINEERS HAVE BEEN busy in the Playa Del Rey Field of Los Angeles Basin for the past week determining the best gas-oil ratio of producing wells in that district in compliance with an order issued by Superior Judge Haas on July 30. The order of the court, which enjoined operators from blowing any measurable amount of natural gas into the air, directed R. D. Bush, oil and gas supervisor, to make a series of tests and report back to the court on August 5. The outcome of this action will prove interesting because if operators fail to adopt the recommendation of the engineering committee of the oil and gas supervisor, the court will in all probability issue a permanent injunction upon the resumption of the hearing. Every operator in the field was named as a defendant although only a few operators were blowing the gas into the air. The daily blow approximated 30,000,000 feet.

On the witness stand, Umpire Pemberton explained, under direction of George Larwill, associate counsel in the proceedings brought by Attorney General Webb on behalf of State Director of Natural Resources Nordenholdt, that tests would be conducted to ascertain the best producing gas-oil ratio for each well for the purpose of eliminating waste of gas and in the saving of energy for the field. The court ordered that in case of an agreement between the supervisor and operators such agreement be reduced to a stipulation for submission to the court for future guidance and action. Operators in the field reduced their production to one-half the volume produced on July 27 for the period from 6 p.m. July 30 to 6 a.m. August 2 in order to permit the engineering committee to survey the result of such action.

The Central Committee of California Oil Producers, official curtailment committee, has determined that the California market will permit operators to produce 530,000 bbls. per day during the month of August. This represents an increase of 27,300 bbls. per day over the allowable of July which had been set at 512,700 bbls. The new allotment is the highest since November, 1930, when the allowable was set at 540,000 bbls. per day. Increasing the allowable production will enhance curtailment and permit marketers to keep stocks at their present level instead of depleting them month by month. It is probable the allowable will be gradually reduced beginning in September due to decreased demand.

The producible allotment of the State for August has been set at 528,865 bbls. per day. This amount, representing the net allotment after computation for overages and underages during the preceding month, is 20,815 bbls. per day higher than the allowable for July. The producible allowable for the San Joaquin Valley fields has been set at 230,900 bbls. per day which represents an increase of 17,635 bbls. per day. This is the greater part of the increases permitted for the month. The Coastal area is given an allowable of 58,705 bbls. per day and Los Angeles Basin fields will be allowed to produce 238,260 bbls. per day. The Kettleman North Dome was given an increase of 3,000 bbls. per day; Mountain View, 4,270 bbls.; Mount Poso, 4,950 bbls.; Elwood, 640 bbls.; Dominguez, 1,860 bbls.; Long Beach, 1,550 bbls., and Inglewood 845 bbls. per day. Huntington Beach, Playa Del Rey, Santa Barbara and Coffee Canyon were reduced in varying amounts.

## A. J. Kerr Is Chosen Chairman of A.S.M.E. Section

A. J. Kerr, manager, Pittsburgh Equitable Meter and Merco Nordstorm Valve companies in the Mid-Continent, has been elected chairman of the Mid-Continent section of the American Society of Mechanical Engineers, succeeding Hollis P. Porter, whose term expired July 1, 1935.

Other officers of the executive committee to serve with Mr. Kerr include Harold W. Manley, Barnsdall Oil Co., vice chairman; Roscoe Ayers, National Supply Co., treasurer; John F. Eaton, Jarecki Manufacturing Co., secretary; W. H. Stueve, Oklahoma Gas & Electric Co., Oklahoma vice chairman; L. C. Price, University of Arkansas, vice chairman for Arkansas; A. J. Mack, Kansas State College, Kansas vice chairman; Bernard Oakland, Louisiana vice chairman.

Mr. Kerr has had a long and active connection with the society. He became a member in 1918, and immediately after coming to this State in 1920 began to assist in building up the society in this territory and has served successively since 1925 as treasurer of the Mid-Continent section two terms, secretary one term, vice chairman one term and as chairman of the section from 1929 to 1931. Besides taking an active part in the executive affairs of the section, Mr. Kerr was a leader in the organization of such important A.S.M.E. research projects as the automatic pipe line pumping station committee, research on prime movers for rotary drilling, and the subcommittee on fluid meters research.

Another member of the present executive committee of the Mid-Continent section who has had a long and active career in the executive affairs of the section is Harold W. Manley, vice chairman.

Harold F. Brindel, Gypsy Oil Co., makes another national officer of the society in Tulsa, having been appointed to succeed W. G. Heltzel as chairman of the petroleum division in January of this year. Mr. Brindel had previously served as local section chairman for two terms.

ARTHUR J. KERR

## Stanolind Is Now Operating the Yount Lee Properties

Following the sale of the Yount Lee Oil Co. to the Stanolind Oil & Gas Co., subsidiary of the Standard Oil Co. (Indiana) for $42,000,000, announced last week, the Stanolind took over operating the properties August 1.

In acquisition of the Yount Lee company, Stanolind assumes fourth place among the producing companies on the Gulf Coast and takes a step which establishes the Standard Oil Co. of Indiana as an important factor in that area. In addition, it adds materially to its already large holdings in East Texas, where the Yount Lee company has approximately 300 producing wells as well as a one-third interest with Sun Pipe Line Co. in a 10-inch line to tidewater at Beaumont.

Other properties acquired by the company include producing acreage in 10 fields scattered over the coast, consisting at present of approximately 280 wells with a daily prorated output of 15,000 bbls.; the entire ownership of another field with six wells making 1,000 bbls. daily; extensive undeveloped acreage, both leased and fee ownership; a tank farm at Spindletop with storage facilities of more than 6,000,000 bbls., a terminal on the Neches River at this tank farm capable of loading 10,000 bbls. an hour; a 12-inch pipe line from the High Island Field to Spindletop, a distance of about 50 miles; and other property.

The most important production at present is at High Island, owned almost entirely by Yount Lee Oil Co., where there are about 50 producing wells with a restricted output of 7,650 bbls. This is a salt dome type of field and is only partially developed. Other producing properties held by the company were Barbers Hill, Spindletop, Hull, Liberty, Sour Lake, all in Texas; and Jennings, East Hackberry, Old Hackberry and Welsh in Louisiana. The company owns the fee of the Sweet Lake Field, Cameron Parish, Louisiana, being developed by Pure Oil Co. None of the fields is fully developed.

Yount Lee Oil Co. was one of the oldest producing companies on the Coast, being closely connected with the development since 1913 when it was organized at Sour Lake by the late M. Frank Yount, T. F. Rothwell, who became president following the death of Mr. Yount about two years ago, and J. H. Phelan. It was originally known as the Yount-Rothwell Oil Co. and carried its operations under this name until 1915, when the company was reorganized as Yount Lee Oil Co., with a capitalization of $50,000.

After the reorganization the company extended its operations to Hull, where in 1922 it got its first important production, and with an increased capitalization of $2,000,000 it moved to Beaumont and began to acquire holdings over the Gulf Coast. In 1925 it started the second oil boom for the Spindletop Field by opening deep production on the flank of the dome.

## Berg, Rieber and Thompson Chosen A.P.I. Directors

NEW YORK, Aug. 5.—The board of directors of the American Petroleum Institute has elected W. H. Berg, vice president of the Standard Oil Co. of California, San Francisco, a director in the production group, and T. Rieber, vice president of Texas Co., a director-at-large. Mr. Berg succeeds the late Oscar Sutro and Mr. Rieber succeeds the late C. B. Ames. Resolutions in memoriam for Messrs. Sutro and Ames were adopted.

Ralph Zook, of Sloan & Zook, Bradford, Pa., resigned as director-at-large and T. P. Thompson, Jr., of Bradford, was elected his successor. Mr. Thompson is president of the Pennsylvania Grade Crude Oil Association.

## Open New Warehouse

The Larkin Packer Co. gave a reception for purchasing agents and oil company officials to celebrate the opening of its new warehouse in Tulsa on Tuesday, August 6. J. J. Larkin and his son, Bill Larkin, came down from St. Louis to attend the party which was arranged by Charles Dougherty, manager of sales in the Mid-Continent. It is estimated that about 200 attended.

# Texas Legislative Investigating Body May Recommend New Commission

ESTABLISHMENT OF A SEPARATE board to replace the Texas Railroad Commission oil and gas division in charge of enforcement of conservation regulations was reported likely to be recommended by the special committee of the legislature which has been holding hearings at Austin, going into the record of enforcement in East Texas.

Members of the committee were said to be of opinion that oil conservation could be best effected by a new board, composed of practical experts, to be appointed by the governor and charged with the sole duty of conserving oil and gas resources. It was believed such a board would be recommended by the committee in its report to the legislature.

Lon A. Smith, member of the Railroad Commission, in response to questioning by Representative W. E. Jones, expressed opposition to an appointive administrative board regardless of the governor who would make the appointments. He said he believed the commission had the situation under control and was capable of handling oil conservation but that if a new board was established it should be elected.

"Would the oil industry best be served by a separate board composed of highly trained, qualified men rather than by a commission with many other duties and who are not qualified by training in petroleum problems?" Jones asked.

"No," replied Smith. "I believe it would be just as well to have it as at present. We have trained, practical men in each division to advise us.

"You couldn't tell if a refinery was operating efficiently, could you?" Jones asked.

"No."

"You would have to have someone to do it for you, wouldn't you?"

"Yes," Smith replied, "and that is just what we are trying to do. We are trying to get the best men available to assist us."

During the hearings the committee has stressed the qualifications of the personnel of the commission's East Texas force and brought out that many employes in the field had no previous experience in the oil industry.

Both Smith and Col. Ernest O. Thompson, commission chairman, have told the committee many jobs in the field do not require special training and that good results have been obtained in many instances from men who came without experience and were trained by the commission.

An effort to establish a new natural resources commission was made in the forty-third legislature. The bill failed by a few votes in the Senate after having passed the House.

Representative Latham of Longview, committee member and one of the sponsors of the new commission bill referred to personnel records of the East Texas staff and commented many applications for employment showed no prior petroleum connection, estimating the number at 50 per cent

"Previous training is no indication as to ability," Smith said. "Many new employes catch on to things quickly and some of our best men were trained by the commission."

Smith said he knew of no instances in which an employe was discharged by one commissioner and rehired soon after by another commissioner. He said the commission had discharged some employes for irregularities and later reinstated them.

Latham inquired into relations between the commission and the attorney general department.

"We have had full co-operation from the attorney general, both from the present office and during Governor Allred's administration," Smith said.

"Are you aware there were about 300 suits pending in which the state was a party when the present attorney general took office and were in such shape, without witnesses or sufficient evidence, a member of the attorney general's staff recommended that they be dismissed?" Latham queried.

"We have always given them all the evidence we had and aided in every way," Smith answered.

"A present assistant attorney general testified that in his opinion that was the only thing to do with them," Latham said, adding he also testified that in 50 per cent of the cases referred to the attorney general was forced to rely on his own investigators or outside sources.

"I didn't know that," Smith said.

Smith reiterated the commission was not influenced by a certain small group of lawyers in granting exceptions to well spacing rules. He said the commission seldom knew the lawyers in a case unless an appeal was taken from the ruling of the examiners. He had never been actuated by outside motives in acting on exception applications.

"I would take it as a gross insult if a man offered me so much as a cigar to aid in getting him a permit," he said.

Smith said he had refused to participate in cases where his son, an East Texas attorney, represented the applicant for an exception and had asked that they be referred to the other commissioners "even though the practice is unfair, since he has as much right to practice as any lawyer."

Smith said the commission long ago had agreed that the system was not perfect.

Latham read testimony of an employe in the Kilgore offices that records could not be found.

"Can you account for the missing records, including those wanted by the committee?" Latham asked the railroad commissioner.

"You always have to depend on the integrity of your employes," said Smith. "They have filing cabinets, locks and keys, sufficient to care for all the records of the commission."

Latham cited discrepancies between reports of runs to stills of two refineries as shown by records of the commission and those of the comptroller. The latter collects a tax on the oil.

The commission books showed that one refinery ran 18,189 bbls. to stills last April, while the comptroller's records gave a run of 132,371 bbls. for the same period. For the other refinery the commission disclosed a run of 36,136 bbls., contrasted the comptroller's report of 240,899 bbls.

Pointing out that the commission records had given both refineries a clean bill, Latham asked if the discrepancies did not indicate the difference in runs was due to hot oil. Smith agreed that the committee's figures probably indicated hot oil runs, and that an actual physical check in the field against the refiners report was needed.

C. V. Terrell, one of the three railroad commissioners, said "confiscation of oil is in danger of becoming a racket. They buy crude oil at auction for 40 cents and sell it for $1 or refine it to make 60 cents per barrel. It offers a great inducement to operators to run excess oil and then buy it in."

A fraudulent telegram to obtain movement of crude figured largely in the hearing. The telegram, purportedly sent by the Railroad Commission, was addressed to H. A. Miles, chief of the commission's East Texas staff at Kilgore, and directed approval of a tender authorizing the Fuel

## Journal Editorial Put Into Record

AUSTIN, Tex., Aug. 6.—Over protests of Chairman Sidney Latham of the legislative oil committee, Chairman Ernest O. Thompson, of the Railroad Commission, introduced into the legislative committee record the editorial in The Oil and Gas Journal of July 25, recognizing enforcement in Texas.

"This is the oil man's Bible," Colonel Thompson insisted. "It at times in the past has been critical of the Railroad Commission's conservation efforts. Its statements now are important in giving the legislative committee perspective in the way the industry reacts to efforts at effective regulation."

Colonel Thompson said that with the reduction by various oil states of production, he considered the danger of a price break out of the way. "The only threatening factor," he said, "is imports."

On the bannisters, left, Andrew Neal, Lone Star Gas Co.; right, B. B. Hayes, Skelly Oil Co. Lower row, left to right, F. J. Latinis, Phillips Petroleum Co.; Earl Statton, Texas Co.; John F. Bricker, Humble Oil & Refining Co.; J. C. Richardson, Gulf Production Co., and E. B. Guyer, Continental Oil Co. Back row, left to right, Joe Lilly, Stanolind Oil & Gas Co.; Hugh Dickson, Shell Petroleum Corp.; Clarence Sale, Magnolia Petroleum Co.; Archie Kautz, Empire Gas & Fuel Co.; Dale Benson, Sinclair Prairie Oil Co.

Oil Purchasing Co. to move 27,291 bbls. of petroleum residuum.

It was presented by Representative Latham during questioning of Ernest O. Thompson, chairman of the commission, but later members of the investigating committee admitted it was evidently fradulent. It had been obtained from Miles during East Texas sessions of the committee.

The photostatic copy exhibited failed to carry any identifying marks of the sending or receiving offices. It was dated May 6, but did not show the year. Signatures of Thompson and Commissioner Lon A. Smith were typwritten. Thompson's given name was spelled Earnest.

Colonel Thompson denied any knowledge of it, and Commissioner Smith made a similar denial that he had signed or authorized his signature on such a telegram. Thompson immediately checked on it. He said he was informed no record existed of the telegram in the Austin or the Dallas telegraph offices. Latham said the committee had investigated records of telegraph offices in Austin, Dallas and Kilgore and could find no telegram.

Thompson asked Latham if the tender was approved by Miles and Latham said it was.

"I can't understand how Miles would approve a tender on a telegram," Thompson said. "That is not our procedure at all."

Thompson said the commission never approved tenders authorizing movement of crude except when ordered to do so by a court. He declared the commission relied solely on its tender board in the field, had never authorized issuance of a tender and had never overruled the board.

Latham asked if copies of approved tenders were received at Austin from the Kilgore office. Thompson said they were. Latham then asked if the tender authorized by the telegram had been caught at the Austin office. Thompson replied he didn't know.

"Then if it wasn't caught and the oil was cleared there is that much hot oil gone, isn't there?" Latham queried.

"I think Miles is a good man, and I am surprised this happened," Thompson replied. "I think he should have called on the telephone to verify the authenticity of the telegram. However, we will trace that oil and find it."

"Suppose it has been burned in somebody's furnace?" Latham asked.

"No matter," Thompson said, "the proceeds can be traced."

Previously Latham had read into the record testimony taken in East Texas hearings quoting employes as saying the commission's records were in a mess.

"Colonel, doesn't that incident within itself indicate there is a lack of correlation between the Austin and Kilgore offices?" Latham questioned.

Thompson said there appeared to be a need for better cross checking and promised it would be instituted.

Representative Augustine Celaya, committee chairman, said the committee was inquiring further into the source of the spurious telegram.

Representative Jones asked that the record make it plain the fake telegram evidently was a forgery, and had been introduced to show it had caused the approval of a tender by Miles and had escaped dectection by the commission employes.

"We wouldn't want it to seem that the committee had been guilty of sharp practice," Jones said.

Latham said he already had announced for the record that the committee had been unable to find records of the telegram and that it apparently was a forgery.

"Mr. Latham, did you know it was a forgery when you asked that question?"

Latham at first replied that he did, then qualified the admission with an explanation he wished to show how as a result of the commission's system of records a tender for a large quantity of oil could be approved on a fraudulent telegram.

Latham went on to tell Thompson that up to June 5 East Texas refineries numbering 28 had a yield of 5,700,000 bbls. shipped, but that commission records showed only a little more than 3,000,000 bbls. Latham estimated the total of "hot" oil for April as over 1,000,000 bbls. and asked Thompson to confirm, using the comptroller and other figures, but Thompson refused.

"You are making the estimate," he said, "I cannot agree with you."

The committee Friday recessed to an unnamed date, which may be around September 1, to be fixed by Chairman Celaya. This was done, it was explained, to give the committee an opportunity to look up new leads.

Members of the committee disclaim any intention of reflecting on Chairman Thompson by producing a telegram they knew was false, but offered it for the purpose of showing the allegedly imperfect system of bookkeeping and checking used by the commission. Mr. Cole and Mr. Thompson instantly recognized it as a forgery.

With a special legislative session prospectively 45 days away, discussion centers on whether the committee will submit a recommendation for creation of a separate body to administer the oil and gas laws.

## Confiscated Gasoline Tax

AUSTIN, Tex., Aug. 6.—Assurance that the state gasoline tax would be paid on approximately 4,225,000 gallons of confiscated gasoline sold under the hot oil and products seizure law has been given by attorneys for the purchaser, Attorney General William McCraw said. The amount in taxes reported due the state has been approximated at $180,000.

# DEATHS

**C. W. MASCHO,** vice president of the National Supply Co., died in a Toledo, Ohio, hospital from injuries suffered in an automobile accident Tuesday, July 29. He was on his way to Cygnet, Ohio, on a business trip, when the accident occurred. Mr. Mascho, identified with the National Supply Co. almost 48 years, was a well-known figure in the oil industry of the Middle West. He leaves his wife and two daughters.

**DR. ARTHUR D. LITTLE,** aged 71, head of Arthur D. Little, Inc., and widely known among petroleum chemists, died at his summer home, Northeast Harbor, Me., August 2, of a heart attack. He was formerly president of the American Chemical Society and had been associated with important research work in the chemical end of the oil industry.

## East Texas Overproduction Is Estimated 41,000 Bbls. Daily

FORT WORTH, Tex., Aug. 5.—Overproduction in the East Texas Field during the week averaged nearly 41,000 bbls. per day. Runs to refineries in the field averaged over 65,700 bbls. per day, with 31 plants operating.

Fuel oil having state tenders only is selling from 40 to 50 cents whereas fuel oil having the federal permit is going for 50 and 60 cents. Regular grade gasoline with federal tenders is bringing 4⅝ cents per gallon whereas gasoline moving by trucks within the borders of Texas is being sold for 3¾ cents. Gasoline sold without tenders is only bringing 2 and 2¾ cents at refineries in the field. A meeting was held in Gladewater during the week by the Independent Marketing Association of Dallas and refiners in the field for the purpose of fixing a uniform price of 4 cents per gallon.

**WEEKLY TANK CAR SHIPMENT REPORT**

Week ending 12:01 a.m. July 28, 1935

| | Cars | Gallons |
|---|---|---|
| Gasoline | 584 | 4,724,610 |
| Fuel oil | 247 | 2,300,102 |
| Residuum | 11 | 89,850 |
| Distillate | 110 | 897,316 |
| Casinghead gasoline | 198 | 1,695,274 |
| Gas oil | 45 | 366,527 |
| Kerosene | 33 | 268,113 |
| Naphtha | 35 | 283,793 |
| Topped or reduced crude | 39 | 327,368 |
| Butane | 4 | 41,969 |
| Total | 1,306 | 10,994,922 |

| Shipped under Federal and State tenders: | No. cars |
|---|---|
| Interstate | 564 |
| Intrastate | 102 |
| Coastwise | 355 |
| | 1,021 |
| Shipped under State tenders only: | |
| Intrastate movement | 285 |
| Total | 1,306 |

## Crystal Pool's Largest

MUSKEGON, Mich., Aug. 6.—Two largest wells in the Crystal Township, Montcalm County, Field have been brought in making 250 and 400 bbls. an hour for daily initials of 6,000 and 9,000 bbls., boosting the field potential to about 30,000 bbls. daily. The larger was J. W. Leonard, Jr., trustee's No. 1 Mrs. Ida M. Husted, NE SW SW Section 2-10n-5w, which was cased on top of the Dundee at 3,177 feet and made 400 bbls. an hour for 16 hours after which it was pinched in to 100 bbls. an hour.

# CONSTRUCTION NEWS

## Alma, Michigan, Plants

Wolverine Petroleum Products Co., Alma, Mich., has completed plans for immediate construction of a 1,000-bbl. skimming plant. W. S. Behrens is president of the company.

Borim Brothers, Detroit, Mich., recently completed plans for construction of a 2,000-bbl. skimming plant at Alma, Mich. The property has been purchased and work will be started immediately, according to the owners.

## Extend Montana Lines

COUTTS, Alberta, Aug. 3.—The International Pipe Line Co. and the Toronto Pipe Line Co. are extending their gathering lines to take production from the southern section of the Cut Bank Field in Montana.

## Gregg County Plant

FORT WORTH, Tex., Aug. 5.—Gilliland Refining Co. of Gladewater, which also has a plant at Overton, reports it will erect a casinghead gasoline plant on a 15-acre site under lease by the Tide Water Oil Co. in the W. W. Simms Survey, Gregg County. The plant is to cost in the neighborhood of $400,000, according to reports from the field, and contracts have already been signed for gas from 100 wells. The location will be on the Jernigan farm.

## Lubbock Gas System

Lubbock, Tex., City Commission adopted a resolution giving notice that on August 30 the commission will pass an ordinance authorizing the issuance of natural gas system revenue bonds and will accept bids from contractors for construction of the system. The bonds will not exceed $1,200,000. Each bid must be accompanied by a copy of a contract for an adequate supply of natural gas to supply Lubbock for 20 years, together with a $12,000 certified cashier's check.

## North Muskegon Line

MUSKEGON, Mich., Aug. 5.—Formal acceptance of a North Muskegon natural gas ordinance was filed Saturady with city officials by Muskegon Gas Co. after approval of the proposed 8-mile extension at a hearing before the Michigan Public Utilities Commission in Lansing. The company was granted conditional permission to lay the $30,000 extension provided the same rates charged in Muskegon and Muskegon Heights are applied and the entire proposal approved by the North Muskegon voters at a special election.

# Refiners Add to August Daily Crude Runs by Relatively Small Amount

By W. T. ZIEGENHAIN

Mid-Continent refiners, during the month of August, will increase their daily average crude runs by the estimated amount of 15,000 bbls., making a total of 509,000 bbls. for the group. A great portion of this estimated increase is due to resuming operations in plants that were recently shut down. This is particularly true among East Texas refineries at which plants an estimated increase of 11,000 bbls. daily is shown to bring the total for the area to 76,000 bbls.

East Texas plants to resume operations in July include the McKain Refining Co. and Pope Refining Co. of Gladewater, the Ocean Refining Co. of Kilgore, and the Wileman Refining Co. of Overton. The Texas State Refining Co., the former Crystal Refinery, has reopened its plant in Kilgore. The Premier Oil & Refining Co. now has its new plant at Greggtown running on a commercial basis. The Pettus Refining Co. is building a new 1,000-bbl. plant in Mathis with the expectation of opening the plant about the first of September.

### Oklahoma Operations

Oklahoma refineries with an estimated decrease of over 3,000 bbls. is the only group in the Mid-Continent area to show a decrease in comparison with their July schedules. This decrease in Oklahoma reflects a healthful condition and a desire to maintain a profitable market. A majority of Oklahoma refiners could justify running more crude if the condition of their gasoline stocks were taken as a basis. Gasoline is moving at a faster rate than estimates suggested two weeks ago and several of the larger units have been filling current orders from current production, stocks having been reduced to a working margin.

In a few instances there is evidence of refinery operators wanting to increase schedules above a normal rate and this fact remains as a constant threat to the market but thus far the resulting increased supply of gasoline has been absorbed.

## Mid-Continent Crude Runs

**Average Daily (Barrels)**

(Advance estimate compiled by The Oil and Gas Journal)

| | 1933 | 1934 | 1935 |
|---|---|---|---|
| January | 399,405 | 448,360 | 426,070 |
| February | 407,125 | 456,619 | 448,810 |
| March | 423,445 | 465,680 | 451,510 |
| April | 441,000 | 458,220 | 467,765 |
| May | 470,460 | 457,165 | 466,015 |
| June | 479,987 | 459,908 | 485,015 |
| July | 525,845 | 477,012 | 494,210 |
| August | 518,510 | 501,750 | 508,960 |
| September | 526,749 | 499,830 | ..... |
| October | 495,756 | 500,755 | ..... |
| November | 481,335 | 500,445 | ..... |
| December | 434,275 | 440,735 | ..... |

### Operations by Refinery Districts

| | August daily crude runs | July daily crude runs | August increase over July, bbls. daily |
|---|---|---|---|
| Arkansas | 21,750 | 20,750 | 1,000 |
| East Texas | 76,400 | 65,430 | 10,970 |
| Kansas | 121,700 | 118,950 | 2,750 |
| N. Central Texas | 42,430 | 42,100 | 330 |
| North Louisiana | 24,750 | 22,750 | 2,000 |
| Oklahoma | 148,090 | 151,740 | *3,650 |
| Southwest Texas | 16,840 | 16,590 | 250 |
| W. Tex.-Panhandle | 57,000 | 55,900 | 1,100 |
| Total | 508,960 | 494,210 | 14,750 |

*Decrease.

Generally speaking, refining is on a profitable basis in the Mid-Continent. A healthful balance has been struck between dollar crude oil and 5¾-cent 70 octane gasoline and the average service station price structure has shown a substantial rise over the year to date, with nothing to tend to turn the course of prices except a crowding of refineries in the Michigan area and the likelihood of their products being forced upon the Detroit and Chicago areas at seriously low levels.

### Refinery Construction

Refinery construction is showing an improvement in the Mid-Continent. In the past month the Continental Oil Co. announced its plan to build a 400-bbl. solvent dewaxing plant at Ponca City and this will be the first solvent dewaxing unit to be built in the Mid-Continent area. Several new refineries are nearing completion and one more plant will be started in the East Texas Field and included in the items of construction are two 1,000-bbl. cracking units. The trend toward utilizing cracking in the East Texas area is pronounced.

Probably the next major construction program to be undertaken in the Mid-Continent area generally will be the modernization of cracking facilities. Most plants have been allowed to run down mechanically and repairs and replacements have been made over a five-year period with the idea of keeping the equipment safe to operate and there has not been sufficient revenue to justify expenditures to make the equipment most efficient. With a return to reasonable profits in operation, this money will probably first go to modernizing this type of equipment. There will be considerable investigating done to determine the feasibility of replacing both the skimming and cracking equipment with combination units and this move may be definitely seen in the plans of a few companies already, even though formal announcement of the work has not been forthcoming.

### OKLAHOMA

| Company and location— | Daily capacity | Aver. daily runs August | Aver. daily runs July |
|---|---|---|---|
| Anderson-Prichard Oil Corp., Cyril | 6,000 | 4,500 | 4,500 |
| Associated Petroleum Corp., Allen | 8,000 | (*) | (*) |
| Barnsdall Oil Co., Barnsdall | 6,000 | 3,500 | 3,500 |
| Barnsdall Oil Co., Okmulgee | 10,000 | 5,000 | 3,000 |
| Bell Oil & Gas Co., Grandfield | 4,500 | 2,700 | 2,700 |
| Black Gold Refining Co., Oklahoma City | 3,000 | 1,400 | 2,000 |
| Century Petroleum Corp., Oklahoma City | 2,500 | (*) | (*) |
| Champlin Refining Co., Enid | 16,000 | 6,500 | 6,500 |
| Continental Oil Co., Ponca City | 30,000 | 17,000 | 21,500 |
| Crescent Refining Co., Holdenville | 1,000 | (*) | (*) |
| Cushing Refining & Gasoline Co., Blackwell | 1,700 | 1,500 | 1,500 |
| Cushing Refining & Gasoline Co., Cushing | 6,700 | 4,100 | 4,100 |
| Deep Rock Oil Corp., Cushing | 10,000 | 9,000 | 9,000 |
| Eason Oil Co., Enid | 5,000 | 2,800 | 2,800 |
| Empire Oil & Refining Co., Okmulgee | 4,000 | 3,600 | 2,500 |
| Empire Oil & Refining Co., Ponca City | 12,000 | 6,800 | 9,200 |
| Globe Oil & Refining Co., Blackwell | 7,500 | (*) | (*) |
| Government Refining Co., No. 1, Oklahoma City | 1,000 | (*) | (*) |
| Government Refining Co., No. 2, Oklahoma City | 3,500 | (*) | (*) |
| Government Refining Co., No. 3, Seminole | 800 | (*) | (*) |
| Hanger Refining Co., Oklahoma City | 1,000 | (*) | (*) |
| Johnson Oil Refining Co., Cleveland | 6,000 | 4,000 | 4,000 |
| Major Petroleum Products, Oklahoma City | 2,000 | 400 | 400 |
| Marathon Oil Co., Bristow | 5,000 | 2,740 | 2,260 |
| Mid-Continent Petroleum Corp., West Tulsa | 40,000 | 19,000 | 19,000 |
| Monarch Refining Co., Oklahoma City | 1,000 | 300 | 300 |
| Omar Refining Co., Garber | 3,000 | 2,500 | 2,500 |
| Paramount Refining Co., Oklahoma City | 2,000 | 700 | 700 |
| Peppers Gasoline Co., Oklahoma City | 500 | 200 | 200 |
| Phillips Petroleum Co., Okmulgee | 6,000 | 4,500 | 4,500 |
| Pure Oil Co., Muskogee | 9,000 | 8,000 | 8,000 |
| Rock Island Refining Co., Beckett | 6,000 | 3,000 | 3,000 |
| Sinclair Refining Co., Sand Springs | 3,000 | 3,200 | 2,800 |
| Sinclair Refining Co., West Tulsa | 6,000 | (*) | (*) |
| Sooner State Refining Co., Oklahoma City | 700 | 400 | 400 |
| Sun Oil Co., Yale | 5,000 | 2,400 | 2,400 |
| Sunray Oil Co., Allen | 7,000 | 2,600 | 2,580 |
| Texas Co., West Tulsa | 15,000 | 12,000 | 12,000 |
| Tide Water Oil Co., Drumright | 15,000 | 12,500 | 10,500 |
| Triangle Producing & Refining Co., Oklahoma City | 1,000 | 1,250 | 400 |
| Wilcox Oil & Gas Co., Bristow | 5,000 | 3,000 | 3,000 |
| Wirt Franklin Petroleum Corp., Ardmore | 4,000 | (*) | (*) |
| Yale Oil Corp., Yale | 2,000 | (*) | (*) |
| Total | 294,400 | 148,090 | 151,740 |

*Shut down.

### NORTH CENTRAL TEXAS

| Company and location— | Daily capacity | Aver. daily runs August | Aver. daily runs July |
|---|---|---|---|
| Allstate Refining Co., Thrall | 2,500 | 1,000 | 1,000 |
| Baird Refining Co., Baird | 1,500 | 1,300 | 1,300 |
| Canyon Oil & Gas Co., Inc., The, Cisco | 500 | (*) | (*) |
| Continental Oil Co., Wichita Falls | 6,000 | 4,200 | 3,700 |
| Co-operative Consumers Refinery, Inc., Megargel | 1,000 | 300 | 200 |
| Empire Oil & Refining Co., Gainesville | 5,000 | (*) | (*) |
| Exchange Petroleum Corp., Albany | 500 | 250 | 250 |
| Falls Refining Co., Wichita Falls | 2,000 | 300 | 300 |
| Gratex Refining & Fuel Co., Graham | 500 | 250 | 170 |
| Gulf Refining Co., Fort Worth | 10,000 | 3,390 | 3,390 |
| Gulf Refining Co., Sweetwater | 5,000 | 3,840 | 3,840 |
| Haskell Oil Refining Co., Breckenridge | 200 | (*) | (*) |
| Hightower Oil & Refining Corp., Brownwood | 750 | 300 | 300 |
| Hill Refining Co., Ballinger | 50 | 50 | 50 |
| Jacksboro Refining Co., Jacksboro | 50 | 50 | 50 |
| LaSalle Petroleum Co., Burkburnett | 3,500 | 700 | 700 |
| Magnolia Petroleum Co., Fort Worth, No. 1 | 12,000 | 4,350 | 4,350 |
| Marathon Oil Co., Fort Worth | 5,000 | 3,700 | 3,200 |
| Moutray Refining Co., Hawley | 600 | 400 | 300 |
| Meunster Refining Co., Meunster | 300 | 150 | 150 |
| New Deal Refining Co., Abilene | 300 | (*) | (*) |
| Nolting Refining Co., Sweetwater | 1,000 | (*) | (*) |
| Norgold Refining Co., West Olney | 400 | 200 | 200 |
| Olney Oil & Refining Co., North Olney | 3,000 | 2,000 | 2,000 |
| Omega Refining Co., Brownwood | 200 | (*) | (*) |
| Phoenix Refining Co., Hawley | 800 | 500 | 500 |
| Panhandle Refining Co., Wichita Falls | 5,000 | 2,500 | 2,500 |
| Panhandle Refining Co., Leuders | 1,200 | 700 | 700 |
| Pentex Refining Co., Echo | 400 | (*) | (*) |
| Pilot Point Refining Co., Pilot Point | 500 | 100 | 100 |
| Sinclair Refining Co., Fort Worth | 5,000 | 2,500 | 2,500 |
| Southtex Refining Co., Trent | 250 | (*) | (*) |
| Southland Refining Co., Olney | 1,000 | (*) | (*) |
| Starlight Refining Co., Inc., Ballinger | 500 | 300 | 300 |
| Star Refining & Producing Co., Fort Worth | 1,200 | (*) | (*) |
| Superior Refining Co., Tiffin | 800 | (*) | (*) |
| Taylor Refining Co., Taylor | 6,000 | 800 | 1,000 |
| Taxman Refining Co., Wichita Falls | 3,500 | 2,000 | 2,500 |
| Texas Pacific Coal & Oil Co., Fort Worth | 3,000 | 2,750 | 3,000 |
| Texas Pacific Coal & Oil Co., Caddo | 1,000 | 700 | 700 |
| Tucker Refining Co., Wichita Falls | 200 | 150 | 150 |
| Waggoner Refining Co., Electra | 6,000 | 2,500 | 2,500 |
| Watt Refining Co., Brownwood | 200 | 200 | 200 |
| Total | 98,430 | 42,430 | 42,100 |

*Shut down.

(Continued on Next Page)

## EAST TEXAS

| Company and location— | Daily capacity | Aver. daily runs August | Aver. daily runs July |
|---|---|---|---|
| Acme Refining Co., Gladewater | 1,250 | 580 | 580 |
| Adams Refining Co., Big Sandy | 1,000 | (*) | (*) |
| Admiral Refining Co., Kilgore | 2,000 | 1,425 | 1,600 |
| Alamo Refining Co., Camp Switch | 2,500 | 1,100 | 1,100 |
| Alton Refining Co., Gladewater | 1,000 | 750 | 340 |
| Apex Refining Co., No. 1, Gladewater | 4,500 | (*) | (*) |
| Apex Refining Co., No. 2, Gladewater | 2,000 | (*) | (*) |
| Artex Refining Co., No. 1, Arp | 2,000 | (*) | (*) |
| Bartlett Refining Co., Kilgore | 2,500 | (*) | (*) |
| Beacon Oil & Refining Co., Henderson | 4,000 | 500 | 500 |
| Blue Diamond Refining Co., Gladewater | 1,500 | (*) | (*) |
| Boneta Refining Co., Joinerville | 500 | (*) | (*) |
| Bradley Refining Co., Kilgore | 2,000 | 750 | (*) |
| Carnation Refining Co., Gladewater | 1,500 | 575 | 300 |
| Century Refining Co., Friars Switch | 2,500 | 1,900 | 1,240 |
| Chief Refining Co., Gladewater | 2,000 | 1,200 | 1,200 |
| Condor Refining Co., Kilgore | 700 | 1,100 | 630 |
| Danciger Refineries, Inc., Longview | 10,000 | (*) | (*) |
| Deason Refining Co., Turnerstown | 500 | (*) | (*) |
| East Texas Cracking Co., Camp Switch | 4,200 | 575 | 900 |
| East Texas Refining Co., No. 2, Longview | 10,000 | 6,300 | 6,300 |
| East Texas Refining Co., No. 3, Friars Switch | 12,000 | (*) | (*) |
| Friar Topping & Refining Co., Friars Switch | 2,000 | (*) | (*) |
| Gilliland Refining Co., Gladewater | 4,000 | 2,800 | 2,800 |
| Gilliland Refining Co., Overton | 5,500 | 1,960 | 1,960 |
| Gilmer Refining Co., Gladewater | 1,000 | (*) | (*) |
| Godlin Refining Co., Gladewater | 500 | (*) | (*) |
| Goodson, Gentry, Carles Refining Co., Gladewater | 1,000 | (*) | (*) |
| Hub Oil Refining Co., Reeds Switch | 2,000 | (*) | (*) |
| Humble Oil & Refining Co., Neches | 5,000 | 450 | 450 |
| Hunter & Knox Refining Co., Reeds Switch | 750 | (*) | (*) |
| Jackson Refining Co., Gladewater | 1,750 | (*) | (*) |
| Johnson Refining Co., No. 1, Kilgore | 1,200 | (*) | (*) |
| Johnson & Burnham, Kilgore | 4,000 | 1,650 | 580 |
| Kent Refining Co., Angus | 4,000 | (*) | (*) |
| Keystone Refining Co., Gladewater | 1,250 | 225 | 500 |
| Kilgore Reclamation Co., Kilgore | 2,000 | (*) | (*) |
| Klitex Reclamation Plans, Inc., Kilgore | 500 | (*) | (*) |
| Lake Refining Co., Gladewater | 2,000 | 640 | 1,150 |
| Lapren Refining Co., Kilgore | 2,500 | 1,630 | 1,200 |
| Lone Star Refining Co., Gladewater | 2,000 | 3,570 | 3,000 |
| London Topping & Refining Co., Overton | 1,000 | (*) | (*) |
| Longregg Refining Co., Kilgore | 500 | (*) | (*) |
| Magnolia Petroleum Co., Corsicana | 5,000 | 3,600 | 3,600 |
| Master Petroleum Co., Waco | 1,000 | 300 | 350 |
| McKain Refining Co., Gladewater | 1,500 | (*) | (*) |
| McMurray Refining Co., Arp | 4,000 | 2,580 | 1,800 |
| Minerva Refining Co., Minerva | 2,000 | 220 | 220 |
| Model Oil & Refining Co., Reeds Switch | 1,250 | (*) | (*) |
| National Refining Co., Camp Switch | 1,000 | (*) | (*) |
| Ocean Refining Co., Kilgore | 2,300 | 210 | (*) |
| Oil Refineries, Inc., Overton | 4,000 | 3,120 | 2,100 |
| Outdoor Refining Co., Kilgore | 900 | (*) | (*) |
| Overton Refining Co., Overton | 3,000 | (*) | (*) |
| Pennant Refining Co., Kilgore | 500 | 50 | 400 |
| Pelican Refining Co., Gladewater | 750 | (*) | (*) |
| Pelican Refining Co., Gladewater | 1,000 | (*) | (*) |
| Pennant Refining Co., Kilgore | 500 | 400 | 400 |
| Petroleum Processing Co., Friars Switch | 200 | (*) | (*) |
| Phoenix Refining Co., Dallas | 5,000 | (*) | (*) |
| Pope Refining Co., Gladewater | 1,500 | (*) | (*) |
| Riverside Refining Co., Gladewater | 1,500 | 660 | 300 |
| Rusk Oil & Refining Co., Overton | 3,500 | 600 | 600 |
| Shoreline Refining Co., Kilgore | 4,000 | (*) | (*) |
| Simms Co., West Dallas | 4,000 | (*) | (*) |
| Sinclair Refining Co., Camp Switch | 5,000 | 1,750 | 2,000 |
| Smith Refining Co., No. 1 Gladewater | 1,500 | (*) | (*) |
| Southern Oil Refining Co., Tyler | 3,000 | (*) | 1,000 |
| Southport Refining Co., Kilgore | 4,000 | 2,480 | 1,600 |
| Stag Refining Co., Kilgore | 1,200 | 200 | 200 |
| Supreme Refining Co., Gladewater | 1,200 | (*) | (*) |
| Swastika Refining Co., Kilgore | 3,000 | 1,170 | 900 |
| Texas Co., Dallas | 16,000 | 12,000 | 12,000 |
| Texas Oil Products Co., Gladewater | 3,000 | 2,500 | 2,500 |
| Texas Refining Co., Kilgore | 200 | (*) | (*) |
| Texas State Refining Co., Kilgore | 1,000 | 220 | (*) |
| Texover Refining Co., Kilgore | 1,000 | 1,070 | 600 |
| Thompson & Bridges Refining Co., Gladewater | 1,000 | 720 | 400 |
| Trio Refining Co., Arp | 2,100 | 2,300 | 1,300 |
| Tyler, Tex., Producing & Refining Co., Tyler | 15,000 | 6,100 | 5,000 |
| Tyreco Refining Co., No. 1, Arp | 2,500 | 1,700 | 200 |
| Tyreco Refining Co., No. 2, Overton | 3,000 | 1,700 | 1,700 |
| Union Refining Co., Kilgore | 3,000 | (*) | (*) |
| Upshur Refining Co., Gladewater | 1,000 | (*) | (*) |
| Utah Refining Co., Kilgore | 2,000 | 1,690 | 300 |
| Walrip & Stewart Refining Co., Omega | 1,000 | (*) | (*) |
| Wichita Refining Co., Gladewater | 1,000 | (*) | (*) |
| Wolfe Refining Co., Kilgore | 1,000 | (*) | (*) |
| Total | 239,200 | 76,400 | 65,430 |

*Shut down.

## WEST TEXAS AND PANHANDLE

| Company and location— | Daily capacity | Aver. daily runs August | Aver. daily runs July |
|---|---|---|---|
| Active Oil Co., Arno | 1,500 | (*) | (*) |
| Aero Refining Co., Pecos | 220 | 100 | 100 |
| Celtex Refining Co., Colorado | 12,500 | 8,000 | 8,000 |
| Concho Refining Co., San Angelo | 250 | 100 | 100 |
| Conden Oil Co., Big Spring | 12,500 | 9,000 | 6,000 |
| Danciger Refineries, Inc., Pampa | 6,500 | 5,500 | 5,500 |
| Gibson Oil Corp., Magic City | 250 | (*) | (*) |
| Howard County Refining Co., Big Spring | 1,500 | 300 | 300 |
| Mertzon Refining Co., Mertzon | 100 | 50 | 50 |
| McNutt Refining Co., El Paso | 2,000 | 750 | 750 |
| Panhandle Refining Co., Kings Mill | 2,000 | 1,000 | 1,000 |
| Paramount Refining Co., San Angelo | 2,000 | (*) | (*) |
| Pasotex Refining Co., El Paso | 14,000 | 7,000 | 7,000 |
| Phillips Petroleum Co., Borger | 50,000 | 18,000 | 19,200 |
| Shamrock Oil & Gas Co., Sunray | 2,000 | 1,300 | 1,500 |
| Shamrock Oil & Gas Co., Meldavis | 1,500 | 1,400 | 1,300 |
| Sinclair Refining Co., El Paso | 2,500 | (*) | (*) |
| Texas Co., El Paso | 2,000 | 1,000 | 1,000 |
| Texas Co., Amarillo | 4,000 | 3,000 | 3,000 |
| West Texas Refining Co., Pecos City | 5,000 | (*) | (*) |
| Wickett Petroleum Co., Wickett | 2,500 | 600 | 800 |
| Total | 125,820 | 57,100 | 55,900 |

*Shut down.

## ARKANSAS

| Company and location— | Daily capacity | Aver. daily runs August | Aver. daily runs July |
|---|---|---|---|
| Berry Asphalt Co., Waterloo | 2,000 | 1,000 | 1,000 |
| Henry H. Cross Co., Smackover | 6,000 | 3,500 | 3,500 |
| Lion Oil Refining Co., El Dorado | 12,000 | 9,000 | 9,000 |
| Macmillan Petroleum Products Co., Norphlet | 2,300 | 2,000 | 2,000 |
| Ouachita Valley Refining Co., El Dorado | 2,500 | (*) | (*) |
| Root Refining Co., El Dorado | 10,000 | 6,000 | 5,000 |
| Simms Co., Smackover | 5,000 | (*) | (*) |
| Stephens Refining Co., Stephens | 750 | 250 | 250 |
| Total | 38,550 | 21,750 | 20,750 |

*Shut down.

## NORTH LOUISIANA

| Company and location— | Daily capacity | Aver. daily runs August | Aver. daily runs July |
|---|---|---|---|
| Acme Refining Corp., Monroe | 100 | 50 | 50 |
| Bayou State Oil Corp., Hosston | 750 | 150 | 150 |
| Griswold Refining Co., Shreveport | 2,500 | 1,500 | 1,500 |
| Louisiana Oil Refining Co., Shreveport, Bossier | 30,000 | 20,000 | 18,000 |
| Pelican Refining Co., Converse | 100 | 50 | 50 |
| Shoreline Oil Co., Lewis | 1,000 | 1,000 | 1,000 |
| Spartan Refining Co., Shreveport | 12,000 | (*) | (*) |
| Stanolind Oil & Gas Co., Vivian | 3,500 | 2,000 | 2,000 |
| Texas Co., Shreveport | 7,000 | (*) | (*) |
| Total | 56,950 | 24,750 | 22,750 |

*Shut down.

## SOUTHWEST TEXAS

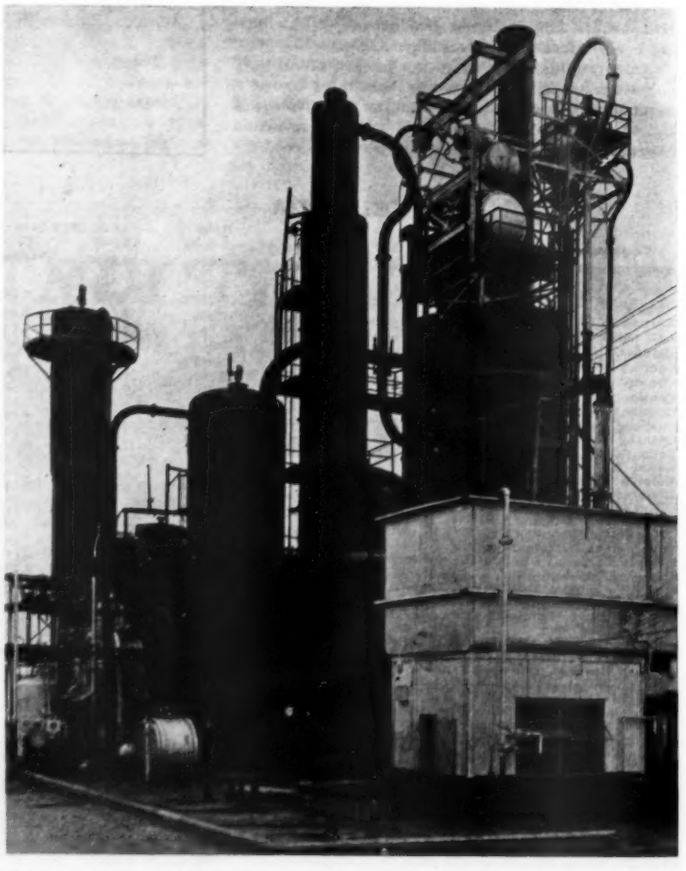
| Company and location— | Daily capacity | Aver. daily runs August | Aver. daily runs July |
|---|---|---|---|
| Amsco Refining Co., Mirando City | 2,000 | 1,750 | 1,500 |
| Bee Oil & Refining Co., Pettus | 1,000 | 500 | 500 |
| Capital Refining Co., Luling | 2,500 | (*) | (*) |
| Chapa Refining Co., Laredo | 100 | 50 | 50 |
| Citizens Refining Co., Luling | 200 | 50 | 50 |
| Humble Oil & Refining Co., San Antonio | 5,000 | 3,050 | 3,050 |
| Magnolia Petroleum Co., Luling | 7,000 | 5,790 | 5,790 |
| Pettus Refining Co., Pettus | 1,000 | 800 | 800 |
| Phoenix Refining Co., San Antonio | 500 | 500 | 500 |
| Pioneer Oil & Refining Co., Somerset | 2,000 | 900 | 900 |
| Rado Refining & Producing Co., McAllen | 500 | 200 | 200 |
| Texas Co., San Antonio | 3,000 | 3,000 | 3,000 |
| Texas Petroleum Products Co., Somerset | 1,500 | 250 | 250 |
| Total | 26,300 | 16,840 | 16,590 |

*Shut down.

## KANSAS

| Company and location— | Daily capacity | Aver. daily runs August | Aver. daily runs July |
|---|---|---|---|
| Barnsdall Oil Co., Wichita | 4,000 | 3,000 | 3,000 |
| Derby Oil Co., Wichita | 8,000 | 4,800 | 4,800 |
| Dickey Refining Co., McPherson | 2,500 | 1,700 | 1,700 |
| Eldorado Refining Co., Eldorado | 5,000 | 4,000 | 4,000 |
| Falcon Refining Co., Inc., Great Bend | 1,200 | 350 | 800 |
| Globe Oil & Refining Co., McPherson | 10,000 | 10,000 | 10,000 |
| Kanotex Refining Co., Arkansas City | 12,000 | 7,500 | 5,000 |
| Kansas Gas & Gasoline Co., Winfield | 500 | 200 | 200 |
| Kreuger Refining Co., Laton | 150 | 50 | 50 |
| National Refining Co., Coffeyville | 6,500 | 4,000 | 4,000 |
| Petroleum Products Co., Chanute | 1,000 | 1,000 | 1,000 |
| Phillips Petroleum Co., Kansas City | 18,000 | 11,600 | 11,600 |
| Security Petroleum Co., Chase | 3,100 | (*) | (*) |
| Shell Petroleum Corp., Arkansas City | 20,000 | 17,000 | 17,000 |
| Sinclair Refining Co., Coffeyville | 12,000 | 9,000 | 9,000 |
| Sinclair Refining Co., Argentine | 9,500 | 7,500 | 7,500 |
| Skelly Oil Co., Eldorado | 23,000 | 17,000 | 17,000 |
| Socony-Vacuum Oil Co., Inc., Augusta | 16,000 | 15,000 | 15,000 |
| Standard Oil Co. (Indiana), Neodesha | 20,000 | 4,500 | 4,500 |
| United Oil & Refining Co., Hutchinson | 1,500 | (*) | (*) |
| Vickers Petroleum Co., Potwin | 3,500 | 3,000 | 2,800 |
| Total | 177,450 | 121,700 | 118,950 |

*Shut down.



Vacuum distillation unit in the El Dorado, Ark., refinery of the Lion Oil Refining Co.

# Potentialities of Dickinson Area May Rival Anahuac and Hastings Fields

By F. L. SINGLETON

THE COMPLETION LAST week of Coast Petroleum Co.'s No. 1 Maco Stewart for a distillate producer 2½ miles southwest of the Dickinson Field, Galveston County, has placed additional light on the potentialities of this area and it may be ranked with such fields as Anahuac, Chambers County, and the Hastings Field in Brazoria County, both of which have been developed into major fields within the past few weeks.

An unusual amount of interest has been shown pertaining to the structural position of the well. Some are of opinion it is on a separate structure, while others believe it an extension to the Dickinson Field on one large structure, with two structural "highs" separated from each other by faults or a "Graben."

Coast Petroleum Co. is an independent concern, composed of Fain Gillock, president, of Washington, D. C.; Sidney Kent, president of the Fox Film Corp., New York, and George K. Spoor of Chicago. Mr. Gillock first became interested in the area a few years ago after an aerial survey made by W. M. Quick outlined the structure. This is the second test drilled by the company. The first test was southwest of the present and was abandoned at 6,577 feet, consequently it is of little importance since it was not drilled to the 8,000-foot horizon. To substantiate the aerial survey, Mr. Gillock had the area checked with a torsion balance survey under the supervision of O. F. Sundt who made the interpretations and recommended the location for the second test.

A block of approximately 5,000 acres is held around the well which centers around the Maco Stewart land in the W. K. Wilson Survey. The test was located on the apex of the dome outlined by the torsion balance picture and the drilling contract let to the C. & C. Drilling Co. After the surface casing had been cemented at 1,511 feet, the test was drilled with an open hole to a total depth of 8,543 feet without any of the formations being cored. A production test was made after an electrical coring test revealed three possible producing sands. The first sand at 8,321-32 feet was identified as a gas sand and the next sand from 8,405-25 feet was also a gas sand and from 8,513-40 feet it showed sand carrying possible oil and gas. Five-inch casing was cemented at the bottom of the hole and the well was tested through perforated casing from 8,513-40 feet. It had the appearance of making a dry gas well, but after it had cleaned itself it was estimated good for 260 bbls. of distillate per day through a small choke with working pressure of 2,900 pounds.

The well is producing from sand, 343 feet below the top of the Frio, topped at 8,190 feet. Based on top of the Frio it is approximately 28 feet lower than Humble Oil & Refining Co.'s No. 1 Schaper abandoned at 9,234 feet, about 2½ miles north and slightly east and 2,000 feet southwest of production in the Dickinson Field. Some are of opinion it establishes the existence of a fault that extends across the field in a southeasterly direction, although this theory may be changed after additional development in the southeast, consequently much attention is being given two tests in process of completion, and an irregular condition has already been noticed in one well, Humble Oil & Refining Co.'s No. 2-A Maco Stewart which offsets the company's No. 1 Danielson that is producing from a deep sand at 9,140 feet, and is the highest well in the field.

No. 2-A Maco Stewart was drilled to the same sand at a total depth of 9,181 feet where it tested gas-cut mud on a drill stem test and is preparing to test at 8,500 feet after plugging back the third time. On two drill stem tests from 9,086-92 feet and 8,726-56 feet it showed for distillate production. Another interesting test is Humble Oil & Refining Co.'s No. 6-A Maco Stewart, 3,000 feet south and slightly west of No. 2-A that is drilling below 7,200 feet after a protection string of casing had been cemented below 7,100 feet.

Arrangements for future development in the southwest extension area are being made and the company has announced intentions of drilling two wells, one 633 feet south of the producer and the other west in the Alex Farmer Survey. If production is developed plans have been made to lay a 6-inch pipe line to Texas City, a distance of 6 miles where oil will be shipped by tankers to New York.

B. S. SoRELLE

RAYMOND B. KELLY

B. S. SoRelle, manager, Texas Production Division, Pure Oil Co., has been transferred to California to assume managership of the new Pacific Coast Division. Raymond B. Kelly, assistant manager of the Texas Production Division, has been promoted to manager with headquarters at Fort Worth.

Since the discovery of the Dickinson Field in 1934, there has been 10 producers completed, 8 by Humble Oil & Refining Co., 1 by Turnbull and Irwin, and 1 by Pure Oil Co. The latter two wells were completed for distillate producers. Most of the development has been along the Dickinson Bayou, although much development has been started to the southeast since the extension made by the Danielson well.

Three to four productive sands are known to exist. The majority of the producers along Dickinson Bayou are producing from a sand slightly below 8,000 feet, although Turnbull and Irwin's No. 1 Joe Piazza, the most westerly test along the bayou, is producing distillate from a shallow sand from 7,945-8,217 feet. It was drilled to 8,418 feet and is producing through perforated casing. In the Danielson test to the southeast, three sands were encountered, one at 7,649 feet, another at 8,043 feet and it topped the sand from which it is producing at 9,109 feet.

These sands are overlapping by a high pressure gas sand, separated by a section of sandy shale and shale. Before the production string is cemented, an electrical coring test is usually made to get the best screen setting, otherwise the completion may result in a high pressure gas well.

Most of the late wells have been completed through perforated casing with the production string cemented at the bottom of the hole. The gas-oil ratio usually runs between 550 to 900 feet per barrel of oil, although one well was completed for a good well with the ratio as high as 1,450 feet. Gravity of the oil runs from 37 to 38 degrees.

The casing program for the 8,000-foot wells consists of approximately 200 feet of 16 to 20-inch surface pipe, 2,000 feet of 10¾-inch casing and a 7-inch production string. The casing record of the deep Danielson producer was 20-inch surface pipe at 197 feet, 13⅜-inch casing at 1,941 feet, 9⅝-inch casing at 7,420 feet, and the 7-inch casing cemented at 9,089 feet.

Humble Oil & Refining Co. has three rigs running, Stanolind Oil & Gas Co. is drilling its first test on the river bed lease, and Pure Oil Co. is drilling No. 2 Shelor, north of its No. 1 Shelor.

Production from the field is being handled by Humble Pipe Line Co.'s 4-inch line that extends to the company's 8-inch line at Webster which runs to Texas City.

The following is a well record of the wells completed:

| Company— | Top Marginulina | Top sand section (Frio) | Total depth |
|---|---|---|---|
| Humble O. & R. Co.: | | | |
| No. 1 Fugger | 7,217 | 8,070 | 8,081 |
| No. 1-A Stewart | 7,037 | 7,789 | *7,916 |
| No. 1-B Stewart | 7,082 | 7,998 | 8,070 |
| No. 1 Jones | 7,207 | 7,900 | 8,039 |
| No. 1 Townes | 7,150 | 7,925 | 8,076 |
| No. 1 Danielson | 6,784 | 7,501 | †9,360 |
| No. 2-B Stewart | 7,083 | 7,895 | 8,063 |
| No. 3-A Stewart | 7,081 | 7,850 | ‡8,146 |
| No. 1 Schaper | 7,622 | 8,062 | §9,234 |
| Pure Oil Co.: | | | |
| No. 1 Shelor | 7,086 | 7,930 | 8,037 |
| Turnbull & Irwin: | | | |
| No. 1 Piazza | 7,245 | 7,990 | 8,418 |
| Coast Petroleum Co.: | | | |
| No. 1 Stewart | 7,430 | 8,190 | 8,543 |

*Blowout. †Plugged back to 9,140 feet. ‡Plugged back to 8,070 feet. §Abandoned.

## North Louisiana Allowable

SHREVEPORT, La., Aug. 5.—The Louisiana Conservation Commission has announced that the daily allowable production for North Louisiana, in which is included the new Rodessa (Trinity sand) area of Caddo County, would remain at 21,000 bbls. a day. Application had been made for a larger allowable for the district. The allowable order was signed by Dr. J. A. Shaw, director.

# Text of Voluntary Fair Practice Code for Marketing Petroleum Products

THE COMPLETE TEXT OF the Voluntary Code of Fair Practices for Marketing Petroleum Products submitted to the industry by the directors of the American Petroleum Institute follows:

### Rule 1

Each vendor of naphtha, gasoline, motor fuel, tractor fuel, kerosene, range oil, heating oil and motor oil shall determine for himself the prices at which he desires to sell each of such petroleum products, and having determined such prices he shall post them at the place hereinafter provided and each price shall remain posted until a new price has been determined and posted.

The prices to be posted shall include the prices applicable to all classes, types, methods and quantities of delivery and to all classes of buyers. The posting shall contain all terms of sale including discounts and credit terms offered and freight rates and delivery costs to be charged or allowed to the purchaser.

The prices for all deliveries from service stations and the prices for deliveries in packages, whether furnished by the seller or buyer, and in tank wagon or truck from bulk plants shall be posted at the place from which the delivery is made. The prices for all other deliveries shall be posted at the place from which the delivery is made but seller may, at his option, as a regular practice, post them at another place within the same state, provided he posts at the place from whch deliveries are made a notice stating the office of the vendor at which the prices therefore are posted. All prices shall be posted at places readily accessible to the public during usual business hours. For five days, exclusive of Saturdays, Sundays and holidays, after prices are posted, and for a like period after deliveries at such posted prices are commenced, records of such posted prices shall be available to any inquirer at the place where they were posted.

All sales, other than sales pursuant to bids required by law to be sealed, and other than sales for delivery in tank car, barge or cargo, or by tank truck into a bulk storage plant fully equipped to receive deliveries directly from barges or tank cars, shall be made at the posted price applicable at the time of sale or at the time the contract to sell is made. When sales are made for delivery in tank cars, barge or cargo, or by tank truck into a bulk storage plant fully equipped to receive deliveries directly from barges or tank cars, the price thereof shall be posted immediately upon the execution of the contract, or acceptance of order, and shall remain posted for 24 hours exclusive of Saturdays, Sundays and holidays. When bids are made which are required by law to be sealed, such bids shall be posted immediately after the time specified for their opening and shall remain posted for 24 hours exclusive of Saturdays, Sundays and holidays.

No sales shall be made unless the prices thereof are posted in accordance with the provisions of this rule.

No rebates, allowances, concessions or benefits shall be allowed in any manner so as to permit any buyer to obtain petroleum products at a net lower cost than the posted price applicable at the time of the sale or at the time the contract to sell is made.

### Rule 2

Coupon books or other scrip of any nature, if used, shall be sold and redeemed at their face value without any discount.

### Rule 3

Selling Below Cost—The selling of goods below cost with the intent and with the effect of injuring a competitor and where the effect may be to substantially lessen competition, or tend to create a monopoly or to unreasonably restrain trade, is an unfair trade practice.

### Rule 4

1. Vendors of petroleum products shall not hereafter construct, lease, lend, furnish, install or re-locate pumps, tanks, driveways, buildings, canopies, air compressors, lubricating oil storage or dispensing equipment, grease lifts or pits, grease equipment, grease guns, air towers, light poles, flood lights, material for driveways, buildings or canopies, or any other equipment of any character whatsoever used or usable in connection with the storage, display, sale or consumption of petroleum products (excepting only oil burners and storage tanks connected therewith, pump globes and the usual advertising signs) for or to anyone engaged in the sale or delivery of petroleum products to consumers or for or to consumers.

2. Vendors of petroleum products shall not hereafter sell any of the things mentioned in paragraph one of this rule (except only oil burners and storage tanks connected therewith) and except that upon the expiration of all contractual relationship for the sale and purchase of petroleum products stored in or dispensed through equipment furnished or leased by the vendor to the buyer, and, on request of the buyer, any equipment described in this rule theretofore furnished, or leased to the buyer must be sold in its entirety to the buyer; or, if the buyer does not request that the equipment be sold, then, on the request of anyone about to sell to the buyer petroleum products to be stored in or dispensed through equipment of such type, the equipment in its entirety shall be sold to such new supplier who may then lend it to the buyer. All such sales of equipment shall be at the fair value thereof. If the owner and purchaser are unable to agree upon the fair value, it shall be determined by arbitration. Anyone about to sell petroleum products to a buyer shall be entitled to use the equipment of the previous supplier

## Appendix A

| | Credit Terms |
|---|---|
| **(1) Gasoline and Kerosene Sales:** | |
| In tank car and barge shipments | One per cent 10 days from date of shipment net 30 days.<br>One per cent on sight draft payments. |
| **In Tank Wagon Deliveries:** | |
| To Resellers | Load-to-load, or net 15th proximo. No cash discount. |
| To Consumers | Load-to-load, or net by end of month succeeding month of purchase. No cash discount |
| Service station deliveries | Cash or coupons or payments, net by end of month succeeding month of purchase. |
| Coupon books, in denominations of not less than ten dollars, may be sold at face value, without discount, for cash, or on credit payable net by end of month succeeding month of purchase. Coupon books issued by any company may be redeemed by any retail outlet where the trade-marked products of that company are sold. | |
| **Truck Train Deliveries:** | |
| From refineries and terminals or bulk plants to jobbers' bulk plants | One per cent 10 days from date of shipment net 30 days. One per cent on sight draft payments. |
| **(2) Gas Oil and Fuel Oil Sales:** | |
| In tank car or barge shipments, or deliveries to ships' bunkers | One per cent 10 days from date of shipment net 30 days.<br>One per cent on sight draft payments. |
| **Truck Train Deliveries:** | |
| From refineries and terminals or bulk plants to jobbers' bulk plants | One per cent 10 days from date of shipment net 30 days.<br>One per cent on sight draft payments. |
| **In Tank Wagon Deliveries:** | |
| To resellers | Load-to-load, or net 15th proximo. |
| To consumers | Net by end of month succeeding month of purchase. |
| **(3) Lubricating Oil and Grease Sales:** | |
| **In Tank Car and Drum Car Shipments:** | |
| Unbranded oils and greases | One per cent 10 days from date of shipment net 30 days, or 30-60-90-day trade acceptance. |
| Branded oils and greases | One per cent 10 days from date of shipment net 30 days, or 30-60-90-day trade acceptance. |
| **L. C. L. Shipments:** | |
| All oils and greases | One per cent 10 days from date of shipment, net 30 days. |
| **Truck and Tank Wagon Deliveries:** | |
| All oils and greases to Resellers | One per cent 10 days from date of shipment net 30 days. |
| To consumers | One per cent 10 days or net by end of month succeeding month of purchase. |
| Service station deliveries | Cash or coupons or payments net by end of month succeeding month of purchase. |

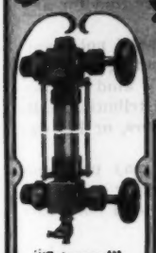
PENBERTHY PRODUCTS

Hydraulic Ejector

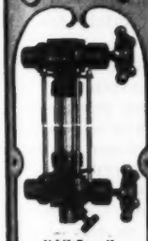
Steam Ejector

# PENBERTHY LIQUID LEVEL GAGES

## MEET ALL OIL INDUSTRY NEEDS


"Safeguard" Automatic Liquid Level Gage

"Navy Type" Liquid Level Gage


"All-Iron" Automatic Liquid Level Gage

Automatic Cellar Drainer (Water or Steam Operated)

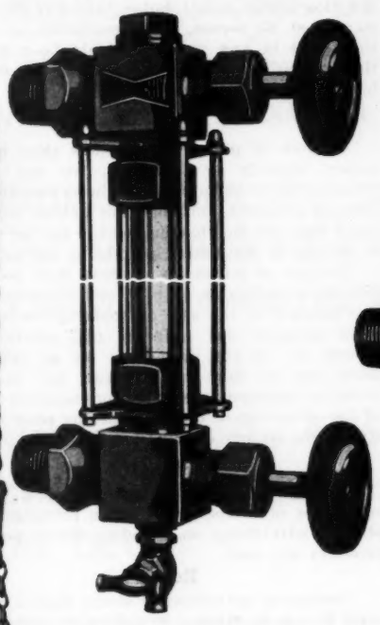
Automatic Injector

Gas Engine Lubricator

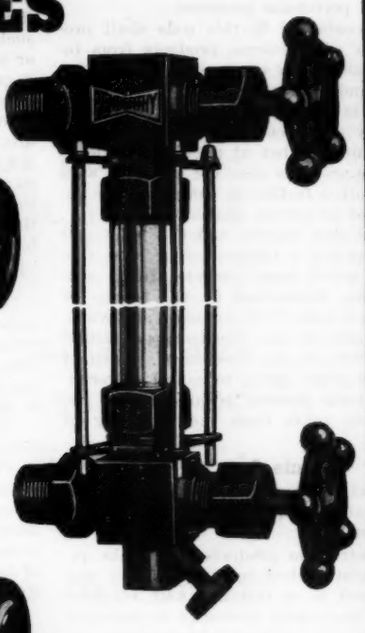
Snap Lever Oiler

Automatic Electric Sump Pump

"NAVY TYPE"
350 LBS. WORKING PRESSURE
500° F.



"SAFEGUARD"
300 LBS. WORKING PRESSURE
500° F.



"ALL IRON"
500 LBS. WORKING PRESSURE
750° F.

PENBERTHY PRODUCTS

THE three gages shown here are very popular in the oil industry because of their consistently dependable operation. All of them are ruggedly built of the highest grade materials by an organization that has had 48 years experience in the manufacture of quality products. The "Navy Type" is made from Navy Bronze Composition M, the "Safeguard" from high grade steam metal bronze and the "All Iron" from a modern electric iron alloy.

All these gages have automatic shut-off. Both upper and lower body have ball check valves that seat immediately and positively to prevent the loss of liquid when glass is broken. The hand operated stop valves may then be closed with safety and a new glass inserted.

Each gage is carefully tested and rigidly inspected at the factory. For detailed descriptions write for a copy of the new catalog.

Penberthy Liquid Level Gages are carried in stock by supply houses everywhere.

## PENBERTHY INJECTOR COMPANY

DETROIT, MICHIGAN
WINDSOR, ONTARIO

MANUFACTURERS OF QUALITY PRODUCTS SINCE 1884

Spring Compression Grease Cup

Plain Compression Grease Cup

Screw Plunger Grease Cup

at any time after ten (10) days after requesting to purchase the equipment as herein provided, subject, however, to the obligation to pay the price determined in the manner herein established. If any previous supplier withdraws his equipment, refusing to comply with the provisions of this paragraph, anyone about to sell petroleum products to the buyer may lend and install equipment of like capacity. Nothing herein contained shall prevent vendors of petroleum products ordinarily engaged in the manufacture and sale of any of the things mentioned in paragraph one of this rule from selling such things to vendors or consumers of petroleum products provided the sale is not conditioned upon the purchase of petroleum products.

3. Nothing contained in this code shall prohibit any vendor of petroleum products from installing or furnishing any of the equipment above mentioned on land, either:

(a) Owned in fee by such vendor; or

(b) Held by such vendor under a valid and binding lease provided that at the time the lease was executed the premises were not improved with any building or other facility or equipment for the sale or storage of petroleum products; or

(c) Held by such vendor under a valid and binding lease creating a tenancy of at least five years duration, which lease provides for a substantial rental not determined by the volume of petroleum products sold at the premises and which lease does not contain any provision permitting either party thereto, in the absence of breach of obligation by the other party, to cancel or terminate it or the term thereby granted before the expiration of five years from the beginning of such term.

### Rule 5

Vendors of petroleum products shall not make any repairs to any equipment of any kind not owned by the vendors.

Vendors of petroleum products may make repairs to equipment owned by the vendors and furnished or leased to or installed with retailers or consumers to the extent necessary to maintain the equipment, its attachments and appurtenances, in a safe and satisfactory working condition, provided such repairs can be made without the removal of the equipment from the premises where installed, but shall not make any changes in such equipment such as the conversion of a hand or air-operated piston type pump or visible type pump into an electric meter pump.

Underground tanks furnished or leased to retailers or consumers, may be replaced with other tanks of the same size or removed from the premises for repair.

### Rule 6

Before any vendor of petroleum products delivers his products to a retailer or consumer whose place of business is painted with the identifying colors of another vendor of petroleum products, not then supplying such retailer or consumer, the new vendor shall paint out such identifying colors with paint of any color other than any one or more of the colors used by the vendor to identify his stations, but, before doing such painting, such vendor shall communicate with the vendor whose identifying colors appear inquiring whether there is any written contract which would be violated by such painting. The vendor to whom the inquiry is presented shall respond thereto within 10 days from the date of the inquiry, giving the information requested, and if he claims that such proposed painting would violate any contract, he shall submit such contract for inspection at his office. If the proposed painting would violate the contract, the painting shall not be done.

Except painting required by this rule, vendors of petroleum products shall not do any painting for or furnish any paint free or sell any paint to jobbers, retailers or consumers for any purpose other than for usual advertising signs and for pumps, gasoline buggies, wheel carts, high-boys, lubsters or lubricating oil tanks through which the products of the vendor doing the painting or furnishing the paint are sold.

Nothing herein contained shall prevent vendors of petroleum products, ordinarily engaged in the manufacture and sale of paint from selling such paint to vendors or consumers of petroleum products provided the sale of paint is not conditioned upon the purchase of petroleum products.

### Rule 7

Vendors of petroleum products shall not lend, lease or otherwise furnish any equipment of any character whatsoever, except trade-marked pump globes and other usual advertising devices, to jobbers or anyone purchasing or receiving petroleum products by pipe line, cargo, barge, tank car or truck train.

### Rule 8

When any pump, tank, or other device for the storage, display, consumption, handling, or sale of naphtha, gasoline, motor fuel, kerosene, or lubricating oil, bears the name, trade-mark, or trade name of any person, firm, association, or corporation engaged in the manufacture or sale of any such commodity, no other person, firm, association, or corporation shall deliver into or deliver for sale from such pump, tank, or other device, or tank or other container connected therewith, any petroleum product, other than that manufactured, sold, or distributed by the person, firm, association or corporation whose name, trade-mark or trade name is so affixed. No person, firm, association, or corporation shall in any way knowingly be a party to the substitution of one grade or brand of petroleum products for another.

### Rule 9

Vendors of petroleum products shall not lend money, directly or indirectly, for any purpose whatsoever, to anyone dealing in or consuming petroleum products, and shall not extend any credit other than for merchandise sold to anyone engaged in selling or consuming petroleum products.

Vendors of petroleum products shall not, either directly or indirectly, pay for, or reimburse to, anyone engaged in the sale or consumption of petroleum products any property tax, privilege tax, license fee or tax, inspection fee or tax, chain store tax, or any other charge, tax or impost levied or assessed by any taxing authority because of the ownership or operation of any place or facility for the storage or sale of petroleum products.

### Rule 10

Vendors of petroleum products shall not pay rentals or otherwise pay for the privilege of displaying advertising on premises where petroleum products are sold.

### Rule 11

Vendors of petroleum products shall not knowingly induce or attempt to induce or assist anyone to break a valid written contract for the sale of petroleum products or a valid lease of premises used for the sale of petroleum products.

Vendors of petroleum products shall not sell or deliver any petroleum products to anyone knowing that such sale or delivery will violate or prevent the performance of a valid written contract.

Nothing herein contained shall preclude the sale or delivery of any petroleum products to any person who justifiably refuses further compliance with any contract.

### Rule 12

Lotteries, prizes, wheels of fortune, or other games of chance shall not be used in connection with the sale of petroleum products.

### Rule 13

Vendors of petroleum products shall not give away anything except that vendors at retail may give away maps, touring information, advertising literature which may be furnished them by their suppliers, and may furnish water, air, wipe windshields and windows, drain crankcases, transmissions and differentials, install and remove tire chains, and furnish such other incidental services to motorists as are generally performed by competitive vendors, and except that manufacturers and compounders of lubricating oil may give samples of lubricating oils for laboratory analysis or samples of lubricating oils other than for automotive purposes (not exceeding the minimum amount necessary for a test) to wholesalers, distributors, jobbers or consumers who are prospective, but not present, users of that lubricant.

### Rule 14

Gasoline shall not be sold from tank wagons or trucks to other motor vehicles except in emergency cases.

### Rule 15

Vendors of petroleum products shall not render any burner service in connection with the sale of heating oils and fuel oils unless a fair and reasonable charge is made for such service and for any parts furnished.

Vendors of petroleum products shall not grant, in connection with the sale of heating oils, any commission or compensation of any kind whatsoever to any one manufacturing, distributing, selling, installing or servicing oil burners, or his employes or agents.

Vendors of petroleum products may pay commissions or other compensation to their own regular employes, commission salesmen and bona fide commission agents.

### Rule 16

The assertion, in written or spoken advertising, or in any other manner, of any false or deceptive claim or representation with respect to the merchandise, prices or services of the one making the assertion, or with respect to the merchandise, prices or services of a competitor, is an unfair trade practice.

The unauthorized use by any vendor of petroleum products of the trade-mark, slogan, insignia, or emblem of any trade association in the petroleum industry, or the false assertion or claim, by advertisement or otherwise, of membership in any association, is an unfair trade practice.

The sale of used oil or reclaimed oil without it being conspicuously marked to be such constitutes false advertising.

### Rule 17

Schedule of credit attached hereto and entitled Appendix "A" is hereby adopted by the petroleum industry as a uniform basis of credit to be applicable to all deliveries, including consignment deliveries, of the products specified in said appendix. Any credit period prescribed in said appendix may be varied by any vendor in connection with a sale to a hospital supported by public subscription and not operated for profit, and in the case of a sale to the federal or any state government or any political subdivision. The granting by any vendor of a longer term of credit or longer discount period or larger rate of discount that that specified in said appendix shall constitute an unfair trade practice.

When any purchaser fails to make payment within thirty (30) days after the expiration of the period of credit extended to such purchaser, the vendor shall make no further sales on credit to such purchaser unless said purchaser makes payment of sums due under the credit terms of his account. During such thirty (30) day period the vendor shall conscientiously endeavor to secure payment and establish the account on the basis provided for above.

Notes, trade acceptances, post-dated checks, time drafts and similar instruments shall not be used as payment of indebtedness in order to obtain any credit accommodation different from that specified in said appendix.

### Rule 18

This code shall apply to all transactions made after this code becomes effective.

This code shall not apply to transactions or contracts between:

(1) Refiners.

(2) Subsidiary or affiliated companies.

(3) A vendor and a vendee, if the vendor sells in each year to the vendee over 500,000 bbls. of gasoline of 50 gallons each.

Companies shall be considered to be subsidiary or affiliated when one owns the majority of the outstanding voting capital stock of the other, or when the majority of the outstanding voting capital stock of each is held in one ownership. A company subsidiary to or affiliated with a refiner shall, for the purposes of this paragraph, be considered to be a refiner.

The provisions of this code shall not apply to contracts made or transactions carried on in the United States with respect to the exportation of petroleum products from the continental United States.

For all purposes of this code, propane, butane and other natural gasoline products shall be considered to be gasoline except when sold for blending or use other than as a motor fuel.

Dubbscracking delights the refinery manager—it makes records of performance and economy of which he is proud—and with good reason

Dubbscracking tickles the sales manager—with Dubbscracked gasoline he betters his gallonage—and at a preferred price

Dubbscracking thrills the motorist because Dubbscracked gasoline makes his engine run better

Dubbscracking gratifies the big boss because it vindicates his good judgment

Dubbscracking pleases the stockholders because it makes money

Dubbscracking makes everybody happy—except your competitors

Universal Oil Products Co
Chicago, Illinois

Dubbs Cracking Process
Owner and Licensor

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## *No Federal Control in New Oil Bill*

The oil bill reported by the Cole Committee and approved at the White House conference for immediate enactment is, in the main, limited to the provisions upon which the industry is agreed: ratification of the interstate compact and permanency of the Connally amendment.

Approval of voluntary trade practice agreements such as the marketing code just submitted to the industry, limitation of imports as under the oil code; and recommendations on demand and allowables on the system followed during the past two years were included in the draft discussed.

There is no mention of Federal control, despite Secretary Ickes' insistence upon it. The bill, in fact, removes the industry from the shadow of the late oil administration, setting up as the only Federal body having anything to do with the operations of the industry, a new independent agency of five men to collect reports on demand and estimate allowables but with no further authority than to make recommendations to the States.

These figures have been assembled by statisticians of the Bureau of Mines who might very well continue that duty without creation of a new body of high salaried officials, but those $12,000 a year jobs may have been part of the price paid for a compromise.

The industry is deeply indebted to Chairman Cole and the members of the House sub-committee which made a study of the industry for thwarting the program for fettering Federal control on the industry. They were strongly supported by Chairman Rayburn of the House Committee and the members of the Texas delegation in Congress.

With the enactment of this measure the industry will feel free to go forward. The interstate compact will be given a fair trial and the states and the industry should make the most of it.

Misgivings being felt that the new Federal board may develop into further Federal control later can best be overcome by the measure of stabilization attained through co-operation of the states and industry.

## *Marketing Code Vital to Industry*

The proposed Voluntary Code of Fair Practices for Marketing Petroleum Products is in reverse really a catalog of unfair practices which have demoralized the marketing branch of the business and thereby adversely affected the entire industry.

If these unfair practices, specifically prohibited in the proposed code, can be eliminated, either by process of law through the Federal Trade Commission, or through co-operation within the industry, the whole industry, producing, refining and marketing, will benefit because stabilization will then be possible.

What are the chances? The original Code of Ethics, adopted in 1931 and signed by 16,000 marketers, was, to speak plainly, a failure. Something more than signatures was needed but those who tried to live up to the code merely found that those who did not took advantage of their sincerity.

The Code of Ethics was eclipsed when the Federal oil code was proclaimed but the oil administration was unable to make any headway on the marketing problem.

Nevertheless matters could not be left as they were. The prevalence of these unfair marketing practices was a constant menace to the whole oil structure. This was clearly seen by C. E. Arnott, vice president of the American Petroleum Institute Division of Marketing, and other leaders who had struggled with the problem on the marketing sub-committee of the Planning and Coordination Committee during the past year.

The necessity for a code was evident and urgent. Experience with the original Code of Ethics and under the Federal oil code had suggested revisions and amendments which might be incorporated in a new code, be submitted to the industry for criticism.

This is the course that has now been taken. The proposed code has been presented to the directors of the Institute and by them is passed on to the industry. Mr. Arnott and his associates propose to offer it at a series of meetings throughout the country next month, inviting opinions and recommendations that will enlist not only the signatures but the active support of marketers generally behind its provisions.

The resulting draft will then be submitted to the Federal Trade Commission, as was the original Code of Ethics. Possibly, the Commission will again divide the rules into two groups, those that it can enforce as a matter of law and those which are not enforceable by law but must rest on co-operation within the industry, with the proviso that if such practices are used in such manner as to become unfair methods of competition or a violation of law over which the Commission has jurisdiction, the Commission will take action as in the case of other violations.

The care with which the proposed code has been drafted to avoid loopholes disclosed in the earlier codes, and the straightforwardness with which Mr. Arnott has presented the case to marketers generally, encourage hope that a really effective code can at last be obtained.

The draft is entitled to the thoughtful study of the industry so that constructive suggestions may be had that will assure real co-operation throughout the oil business.

# STANDARD
## SEAMLESS
The One Best Pipe For Every Job

+

## DRILL PIPE
Regular and Special Alloy

+

## CASING
Regular and "Simanco" for Deeper Wells

+

## LINE PIPE

+

## TUBING
Regular and Upset

+

## STILL TUBES
Low Carbon, Low Chrome, Chrome Molybdenum & other Alloys

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## All Sizes 1/4" i.d. to 16" o.d. inclusive

Products of the Oldest Operating Pipe Mill in America

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SALES OFFICES: NEW YORK, BOSTON, PITTSBURGH, CHICAGO, ST. LOUIS, TULSA, LOS ANGELES, HOUSTON, SAN FRANCISCO

WELDED MILLS: ETNA, PENNA., SHARPSBURG, PENNA. . . . SEAMLESS MILLS: AMBRIDGE, PENNA.

# NEWS FROM FOREIGN LANDS

## United Kingdom

The United Kingdom which is the most important European market for petroleum products, increased its imports the first six months of 1935 according to official reports of the Board of Trade and new records in consumption were established. The government report shows that the imports for the first half of 1935 totaled 1,444,381,000 imperial gallons (approximately 228,000 bbls. daily) which compares with 1,341,947,000 gallons (211,800 bbls. daily) for the same period in 1934. The value increased from 16,063,558 pound sterling in 1934 to 17,052,501 in 1935.

The following table summarizes the imports into the United Kingdom for the first six months of 1935 and 1934 (data in imperial gallons and barrels daily):

| | 1935 | 1934 |
|---|---|---|
| Crude oil | 259,167,000 | 250,358,000 |
| Barrels daily* | 40,910 | 39,520 |
| Gasoline | 647,150,000 | 562,702,000 |
| Barrels daily | 102,150 | 88,830 |
| Kerosene | 96,525,000 | 109,276,000 |
| Barrels daily | 15,240 | 17,250 |
| Gas oil | 53,149,000 | 65,661,000 |
| Barrels daily | 8,390 | 10,360 |
| Fuel oil | 339,703,000 | 302,213,000 |
| Barrels daily | 53,640 | 47,710 |
| Lubricating oils | 48,434,000 | 65,661,000 |
| Barrels daily | 7,650 | 8,120 |
| Miscellaneous oils | 253,000 | 272,000 |
| Barrels daily | 400 | 430 |
| Total | 1,444,381,000 | 1,341,947,000 |
| Barrels | 41,268,000 | 38,341,340 |
| Barrels daily | 228,000 | 211,830 |

*Imperial gallons changed to barrels (42 gallons) on basis of 35 gallons per barrel.

Imports of crude oil and refinery products into the United Kingdom are a fairly accurate gauge of consumption as there is no domestic production except a small quantity from shale oil.

Re-exports from the United Kingdom for the first half year totaled 82,537,000 imperial gallons or approximately 13,000 bbls. daily. For the same period last year the exports were 51,317,000 gallons or 8,100 bbls. daily. Taking into consideration these exports and the indicated gain in consumption of petroleum products in the United Kingdom the first half year was about 7 per cent.

As shown in the table the greatest gain in imports for the first half year was in gasoline, which increased 15 per cent. The output of automobiles manufactured by domestic plants and imports have increased resulting in a substantial gain in domestic requirements for motor fuels. Its requirements in fuel oils has also increased materially despite efforts made to increase the consumption of coal of which the United Kingdom has large supplies. Imports of kerosene, gas oil and lubricating oils so far this year are running behind last year.

The data on crude oil imports indicate that crude runs to stills at refineries in United Kingdom have passed an average of 40,000 bbls. daily, a small gain over last year. Iraq now leads all countries as a supplier of crude oil for refineries in the United Kingdom. The daily average imports for the first six months were slightly more than 12,000 bbls. daily. In this connection it is interesting to note that these imports from Iraq about equal the decrease in crude imports from Iran (Persia). For the first six months of 1934 the crude imports from Iran totaled 20,300 bbls. daily and for the same period this year they had decreased to 7,000 bbls. daily. The Anglo-Iranian Oil Co., Ltd., which is the most important refinery in the United Kingdom, in the past has supplied its refineries in that country with crude oil from Iran. It is also one of the four principal factors in the Iraq development and the data indicate that it has shut off part of the imports from Iran to take care of its quota of the Iraq output.

The five principal suppliers of the imports of refined products for the six-month periods are as follows (data in imperial gallons):

| | 1935 | 1934 |
|---|---|---|
| **GASOLINE** | | |
| West Indies | 275,647,000 | 250,546,000 |
| Iran | 139,589,000 | 94,500,000 |
| United States | 59,691,000 | 67,135,000 |
| Rumania | 37,669,000 | 23,819,000 |
| Mexico | 32,094,000 | 28,560,000 |
| **KEROSENE** | | |
| Iran | 39,895,000 | 29,928,000 |
| Rumania | 14,422,000 | 20,648,000 |
| Mexico | 13,338,000 | 9,371,000 |
| United States | 5,691,000 | 36,162,000 |
| Russia | 2,002,000 | 3,476,000 |
| **LUBRICATING OIL** | | |
| United States | 29,780,000 | 34,178,000 |
| Russia | 8,595,000 | 8,019,000 |
| Mexico | 5,572,000 | 4,018,000 |
| Germany | 1,560,000 | 1,205,000 |
| **GAS OIL** | | |
| Rumania | 13,818,000 | 20,108,000 |
| United States | 7,930,000 | 31,428,000 |
| Russia | 2,152,000 | 2,688,000 |
| **FUEL OIL** | | |
| West Indies | 166,072,000 | 170,357,000 |
| United States | 68,562,000 | 33,588,000 |
| Mexico | 51,026,000 | 41,743,000 |
| United States | 17,068,000 | 11,118,000 |

These data on countries importing petroleum products into the United Kingdom in general indicate a trend which was apparent last year. The United States is decreasing as a factor with a substantial gain by the two Shell and one Standard of New Jersey refineries which constitute the refining industry of the West Indies.

The United States continues to be the most important factor in the wax markets of the United Kingdom. The imports for the first six months of this year totaled 265,707 cwt. (29,759,000 pounds), a large gain when compared with the 205,850 cwt. total for the first half of 1934. This represented more than 50 per cent of the total imports. Poland was second to the United States with imports of 100,833 cwt. for the first half year.

## Trinidad

Drilling operations are being carried on in Trinidad this year at a slightly higher rate than in 1934 with an increase in crude oil production resulting. Recent reports showed that the daily crude oil production was running from 31,000 to 34,000 bbls. daily. Last year according to official reports the production averaged slightly less than 30,000 bbls. daily which was a 12 per cent increase over the 26,200-bbl. production for the same period in 1934.

The reports show from 8 to 14 wells start drilling monthly with total for 1934 of 122 tests. Most of these tests were drilled within the proven territory of known fields and very few dry holes were reported. The government in its reports divides the operations between lands owned by the Crown and those owned by private interests. The operations in both cases are carried on by private companies.

The information on 1934 operations shows that drilling on the Crown oil rights totaled 256,455 feet with a total production of 6,391,544 bbls., and on private lands, 95,328 feet were drilled with a total production for the year of 4,502,819 bbls. This total of 351,783 feet for 1934 compares with 235,702 feet in 1933 and 173,287 feet in 1932. The 1935 drilling so far is running ahead of 1934.

There are six refineries located in Trinidad, all of which are operating at this time. Most of them are topping and asphalt plants but two refineries have cracking facilities. They have a capacity of 2,000,000 tons annually or 40,000 bbls. daily. Recent reports show that these refineries are running more crude to their stills than they did last year with an increase in exports.

## Poland

During the year 1934 the production of crude oil in Poland amounted to 529,205 tons which in comparison with 1933 showed a further decrease in the production of about 21,460 tons. The consumption amounted to 60 per cent of produced crude.

The whole of this production was refined by the Polish refineries and the yields of the main products were as follows:

| | Tons |
|---|---|
| Gasoline | 85,687 |
| Kerosene | 171,727 |
| Gas oil | 90,589 |
| Lubricating | 77,674 |
| Paraffin wax | 28,305 |
| Other products | 30,921 |
| Total | 484,803 |

The production of natural gas amounted to 462,210,028 m³ in 1933, and 468,952,401 m³ in 1934. This gas was partly consumed in the mines and partly in towns connected with the gas district by a system of pipe lines. The production of natural gasoline from natural gas amounted in 1934 to 40,525 tons.

During the recent months the Polish government took over the management of the paraffin wax export from the Polish oil companies. By this step the government secured for itself a dominant influence on the Polish oil industry. The exportation of paraffin wax amounted to 19,532 tons over the past year.

One of the Polish refineries the "Galicja" Oil Co., has ordered a Foster Wheeler pipe still unit for atmospheric and vacuum distillation.

## U. S. S. R.

Some increase in purchases of oil field and refinery equipment by the oil administration of the U.S.S.R. in the United States is to be expected as a result of the recent trade treaty with the Soviets, according to representatives in the United States. Under the treaty the Soviets agree to purchase $30,000,000 worth of goods and supplies in the United States over the next year.

D. A. Rosoff, new head of the Amtorg Trading Corp. representative of the U.S.S.R. in the United States in all trading within the United States, arrived in New York last week from Moscow. He did not elaborate on the explanation previously given in Moscow regarding plans for purchases in this country. It was announced at the time the treaty was negotiated that the bulk of the money would be spent for heavy machinery with special emphasis placed on railroad equipment and equipment used in steel plants. The amount is so small that the money available for each industry probably will be small.

Despite the ending of plans for extending Soviet credit in this country early this year, steady purchases of oil field and refinery equipment have been made. This includes drilling rigs and a contract for a 12,000-bbl. refinery recently entered into with an American concern. In addition the representatives of the U.S.S.R. have bought considerable special equipment such as valves and control instruments for use in oil operations.

It was announced last week that the Socony-Vacuum Oil Co., Inc., had purchased 250,000 bbls. of gas oil and kerosene from the Soviets. The company has been a steady buyer of Russian petroleum products over a period of several years, the total amounting to several million barrels. The products are distributed through the Far East marketing facilities of the company. The oil is paid for in American dollars which aids in establishing a favorable trade balance for the U.S.S.R. in this country.

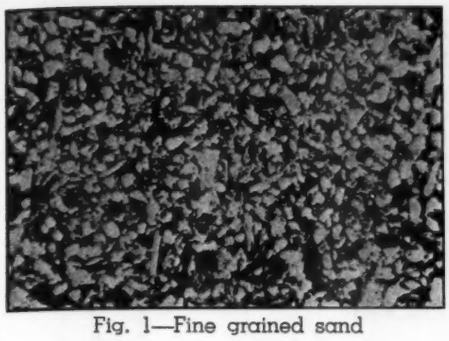


Fig. 1—Fine grained sand

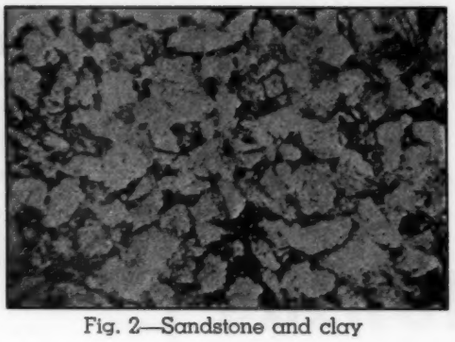


Fig. 2—Sandstone and clay

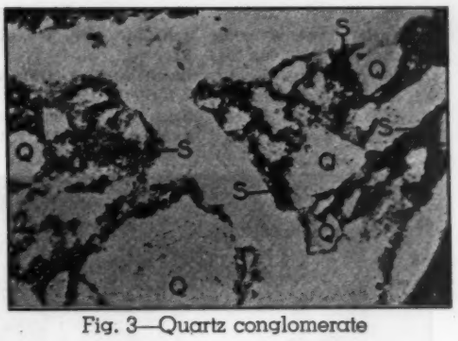



Fig. 3—Quartz conglomerate

# Oil Bearing Formation Characteristics Yield Vital Data on Repressuring

By KENNETH B. BARNES*

THE POSSIBILITIES OF SUCcessful and profitable repressuring of oil-bearing formations are more assured by definite knowledge and application of several forms of science and engineering. The problem resolves itself into something more than forcing gas or air into one well and pumping oil from another. It is desirable to draw on many phases of geology, chemistry, physicis, physical-chemistry, on mechanical, civil and petroleum and natural gas engineering, and to use the knowledge the petroleum research laboratory has developed. While the search for new discoveries and the solution for many of our present unsolved problems continue in the research laboratories, there is much valuable material already available that should be more widely and fully utilized by operators.

This series of articles will attempt to summarize some of the material of this sort in the hope it may serve in some measure to stimulate interest among field men in the various technical phases involved in repressuring.

For the purposes of this survey, the process can be divided into three sections, each a complete field in itself, but when put together the picture of the entity can be clearly obtained.

It will not be possible to cover completely the material concerned in each section, and only one or two topics will be discussed in each and they will be treated separately as sands, crudes and mechanical equipment.

It is desirable for the operator to know the

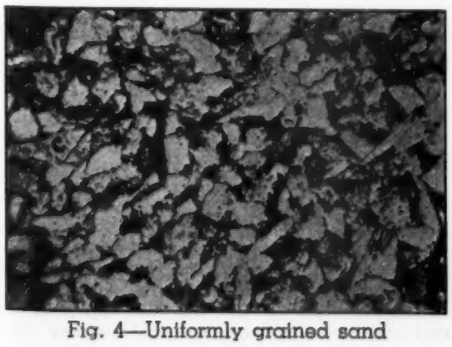


Fig. 4—Uniformly grained sand

chemical composition and texture of the sand. Mineralogy lends aids by photomicrographics made from small thin sections of the sand. From these the composition and texture are obtainable. Some of the excellent work of A. P. Honess, particularly "A Study of the Microscopic Characteristics of Pennsylvania Oil Sands, with Special Reference to Porosity Determinations." Min. Ind. Exp. Sta. Bull. 9, Penna. State College, 1930, is recommended and some photomicrograph plates are shown in the following cuts marked Figures 1, 2, 3, 4, 5 and 6.

*Contribution from Geologic Standards Co., Tulsa.

In this series of three articles, Kenneth B. Barnes, formerly instructor of Petroleum and Natural Gas Engineering at Pennsylvania State College, has reviewed the technical aspects of repressuring oil and gas bearing formations. The importance of applying laboratory research and scientific principles to this type of work is stressed. As many old properties in fields outside of Pennsylvania are now ready for some form of increased recovery methods it is believed this series of articles is both timely and valuable.

Figure 1 shows an exceedingly fine-grained sandstone with such secondary products as chlorite, iron hydroxide, sericite, and clay substance abundantly interspersed among angular quartz grains. The angularity and uniformity of the quartz grains are distinctly marked. The average grain size is 1/20 mm. by 60. Porosity at 200° F. is 7.1 per cent; at 1,200° F. it is 11 per cent. (Locality, first sand, surface outcrop at Tidioute, Pa.)

In Figure 2 is shown a fairly uniform sandstone with a clay-silica bond. The darker material appearing interstially affords a sharp contrast to the lighter quartz areas shown in the

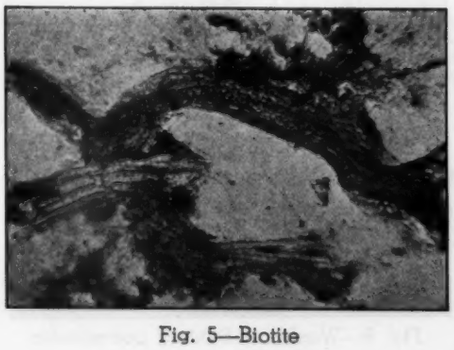


Fig. 5—Biotite

photograph. This argillaceous material is often changed to finely divided sericite through pressure and dehydration resulting in decrease of volume by 60. Porosity 17.7 per cent at 212° F.; at 1,112° F. it is 19.45 per cent. (Locality, second sand, McKinley well No. 32, depth 651 feet.)

A fine quartz conglomerate (Q), showing interstitial development of granular siderite (S) 32 by 60, depth 792 feet is shown in Figure 3. (Locality, third sand, McKinley well, Oil City, Pa.)

Figure 4 shows a fine sandstone of uniform grain with all interstices plugged with micaceous material or carbonate. Even along contacts of quartz grains, finely divided micaceous substances may be observed under higher magnifications. The principal minerals making up the bond are biotite, both fresh and altered (Bi), muscovite (M), sericite, kaolin, carbonate and silica. Chlorite, sericite, carbonate and silica are secondary. Section taken oblique to bedding planes (x60). Porosity at 200° F. is 6.8 per cent. (Locality, Kane Prop., Pa., Bradford sand, SS 721 feet in sand.)

In Figure 5 is shown bent and twisted shreds of depositional biotite, partly altered to chlorite, are frequently observed in oil sands and, when occurring in quantity they may influence the porosity and permeability. Due to their flaky habit, biotite fragments may remain in suspension longer than other minerals of lesser specific gravity and finally settle at great distances from their source where the sediments are extremely fine. Section

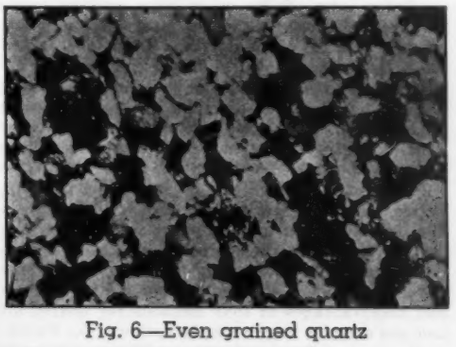


Fig. 6—Even grained quartz

taken across the beds. (Locality, Duke Center Prop., Pa., bottom foot of Run No. 8.)

An even-grained quartz mosaic representing the rock texture are exhibited across the bedding planes as shown in Figure 6. The light and dark areas alike are quartz around which there is a slight development of micaceous material. Silica is predominant as the cementing material. Crossed

nicols. by 60. Porosity 15.5 per cent at 200° F. (Locality, second hand, McKinley well, No. 32 depth 1665 feet, Oil City, Pa.)

In one interesting experiment by G. A. Burgener, described on page 169 of Bulletin 12, Min. Ind. Exp. Sta. Penna State College, 1930, a specimen of Third Venango sand was impregnated with

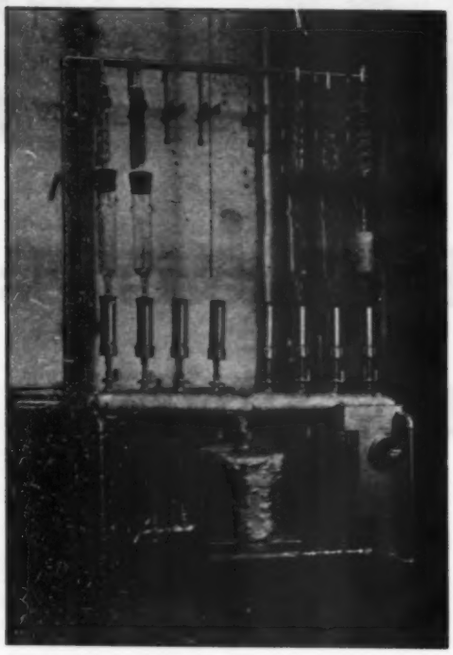


Fig. 8—Battery of extractors for removing oil and water from sand specimens

liquid bakelite, then baked sufficiently to harden the bakelite. A thin section made from the specimen illustrated the interconnected porous system common to most oil producing sands, as shown in Figure 7.

Leaving the composition and grain arrangement of the sand to the mineralogist, we may turn to the production laboratory for analyses of the physical properties of the sand.

If the sand to be tested is in the form of a core, usually the first thing done is to select representative samples, spaced at short intervals, and determine the elevation and identify each for further study.

The most common tests in the laboratory are for oil and water saturation, porosity, permeability, and grain size. E. S. Hill in "Methods of Determining the Saturation of Oil Sand Samples," read before Fifth Annual Petroleum and Natural Gas Conference State College, Penna. April 26, 1935, has recently presented a critical analysis of methods available for testing the oil and water saturation of core samples.

Before any of the other tests may be made, however, the test specimens must be thoroughly cleaned and all oil, water, and bituminous materials removed. The cleaning is conveniently accomplished by extracting the specimens with some organic liquid. Carbon tetrachloride or a closely fractionated, rather low boiling gasoline may be used. A battery of extractors is shown in Figure 8 as developed by Doctor Hill.

The clean samples can be tested for porosity, permeability, and grain size. Porosity is simply a measure of the storage capacity of a sand, i.e., the percentage of voids present in a unit volume of specimen. Several methods are available for the determination of porosity, and the advantages and disadvantages of four methods for testing oil and gas samples were recently reviewed by Fancher, Lewis and Barnes, in "Some Physical Characteristics of Oil Sands," Bulletin 12, Min. Ind. Exp. Stat. Penna State College, (1935). One type of porosimeter is illustrated in Figure 9.

Whereas the porosity indicates the volume a piece of sand will hold within itself, the permeability reveals the velocity a fluid will obtain in passing through the piece of sand under given conditions. In other words, permeability is the

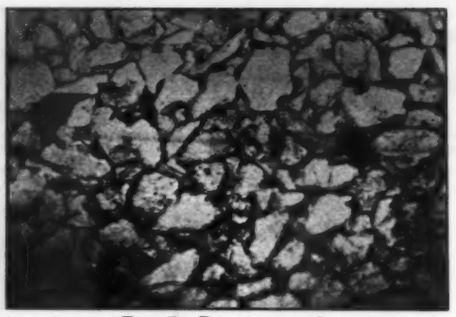


Fig. 7—Porous sands

measure of tightness or looseness of a sand when we speak of its ability to transport oil or gas. A line drawing of a permeameter used in this test is shown in Figure 10.

The technical unit of permeability is the darcy. A sand has a permeability of one darcy, if over a face of one square centimeter one cubic centimeter per second of fluid travels one centimeter through the sand under a pressure drop of one atmosphere. This unit usually is a small number for most sands, and, therefore, permeability commonly is expressed in millidarcys, or a thousandth of a darcy. A very "tight" sand such as the Third Bradford may have a permeability of 5 millidarcys, while a moderately "loose" sand, such as the Third Venango, may have a permeability of 200 millidarcys. The Woodbine sand of East Texas may be as high as 3,000 millidarcys or 3 darcys.

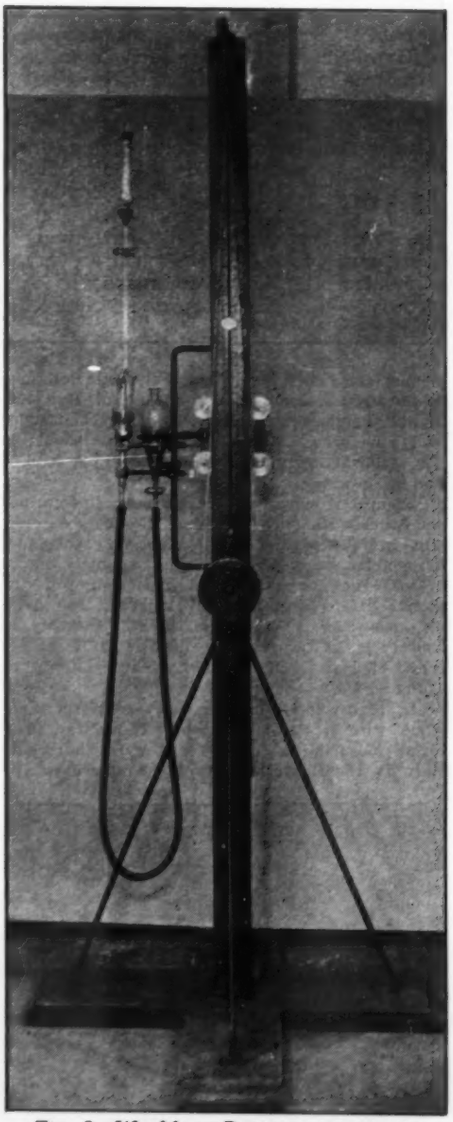


Fig. 9—Washburn-Bunting porosimeter

To summarize, it can be seen that by coring one or more wells on a lease which is being considered for re-pressuring, an insight may be had; (1) as to the oil content, from which the actual recovery may be estimated, (2) as to the performance of different strata and sections of a stratum in regard to well spacing, and the ability of the sand to take compressed natural gas or air at a given pressure. These things, of course, are valuable both in planning the project, evaluating its possibilities, and in later development and operation of the lease.

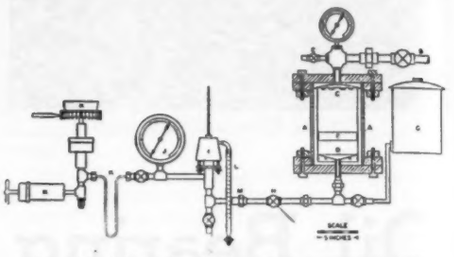


Fig. 10—Line drawing of a permeameter

## Petroleum Research Papers Before Chemical Society

Oil experts from all over the country will participate in the ninetieth meeting of the American Chemical Society in San Francisco, August 19 to 23. Sixteen papers dealing with petroleum research will be presented before the Division of Petroleum Chemistry, F. W. Hall of New York, chairman.

L. C. Snider and B. T. Brooks of New York will discuss "The Coming Shortage of Petroleum in the United States and Some of Its Probable Effects" at a meeting of the Division on Wednesday, August 21. Other speakers are:

Sidney Charles Singer, Jr., Roy Russell Wilson, and George Granger Brown, all of University of Michigan; A. C. Bratton, Jr., W. A. Felsing, and J. R. Bailey, University of Texas; J. C. Morrell, C. G. Dryer, W. L. Benedict, K. M. Watson, Jerome L. Wien, George B. Murphy, C. D. Lowry, Jr., and Gustav Egloff, Universal Oil Products; Ulric B. Bray, Union Oil Co. of California, and W. H. Bahlke, Standard Oil of Indiana.

A symposium on the utilization of natural gas hydrocarbons will be held Tuesday, August 20, jointly with the Society's Divisions of Gas and Fuel Chemistry and Industrial and Engineering Chemistry. Research reports will be given by Hans Tropsch, C. L. Thomas, and Gustav Egloff, Universal Oil Products Co.; H. B. Hass, E. B. Hodge, E. T. McBee, B. M. Vanderbilt and Paul Weber, Purdue University; W. Z. Friend and Theodore W. Legatski, Philips Petroleum Co., Detroit.

At a general meeting on Tuesday Bruce B. Farrington and W. N. Davis, Standard Oil Co. of California, Richmond, will speak on "The Structure of Lubricating Greases." A report by E. N. Klemgard, Shell Oil Co., Martinez, Calif., will deal with laboratory service testing of automotive lubricating greases.

Speakers at the Tuesday afternoon session include Miroslav W. Tamele, V. Zahn, and Lloyd B. Ryland of Shell Development Co., Emeryville, Calif.; and R. P. Tucker of the California State Department of Agriculture.

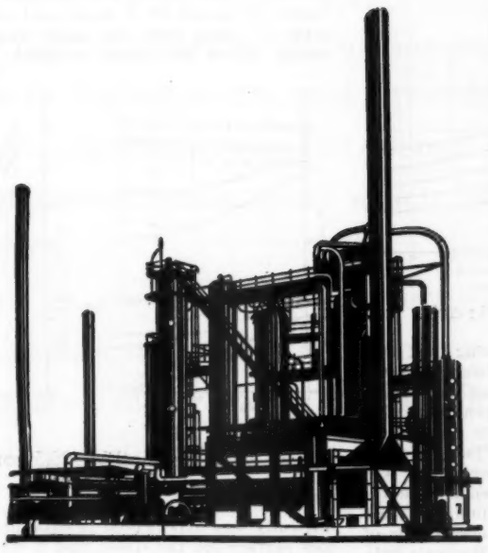
## British-American

TORONTO, Ontario, Aug. 3.—With a view to entering the province of British Columbia as refiners and distributors of petroleum products, British-American Oil Co., Ltd. has registered in that province as an extra-provincial company. The head office for British Columbia is at Kelowna, with R. J. Cristian as attorney. The British-American company has been operating in the Okanagan Valley of British Columbia this year but has not yet entered Vancouver or Victoria. No refining operations are contemplated for the near future, the company drawing its supplies from its plants at Coutts, Alberta, and Moose Jaw, Saskatchewan.

# PHENOL EXTRACTION

(SINGLE SOLVENT)

## by Kellogg



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# Oxidation of Motor Oils and the Effect of Tar Residue on Friction Results

By E. R. REDGROVE,
Ph.D., B.Sc., F.C.S.*

ALTHOUGH MUCH STUDY HAS separately been devoted both to the oxidation and oiliness of lubricating oils, it is only comparatively recently that the importance of studying these two properties in conjunction with one another has been realized. Gilson[1] showed that the friction of an unloaded bearing was greater in an atmosphere of hydrogen than in an oxidizing at-

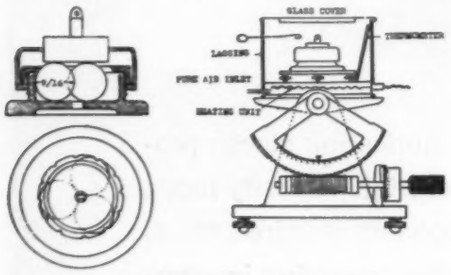


Fig. 1—Static friction apparatus

mosphere, and Stanton[2] found a great difference between the seizing temperatures of two mineral oils which were otherwise almost identical. Investigation of the cause of this difference by Hardy and Nottage[3] showed that it was an oxidation phenomenon, and that the lubricating value of a mineral oil could be temporarily reduced by percolating the oil through chemically clean glass beads or silica chips. Further work by Dover and Appleby,[4] by Nash, Stanley and Bowen,[5] and by Batchelor[6] showed that the friction of an oil is lowered by mild oxidation, and, finally, the researches of King[7] have shown that the lubricating value of mineral oils under oxidizing conditions is governed by suitable blending.

Because of the increasing temperatures which lubricating oils are continually being called on to withstand, the subject of oxidation lubrication is becoming more than ever important, and merits closer study, particularly in view of the changes which are taking place in the alloys used for bearings and in the refining of lubricating oils. Although the work to be described, conducted during the period 1927-1931, has been carried to a more advanced stage by the researches of King and others, the problem was attacked from an entirely different angle, and yet the results pointed to the same conclusions.

All mineral lubricating oils contain traces of petroleum acids, and the acid content invariably increases whilest the oils are in service, due to the partial oxidation of the less stable hydrocarbons. A great variety of acidic bodies is formed, including many of the lower members of the fatty acid series; for instance, the water separated from turbine lubricating systems, from air compressor intercoolers, etc., frequently contains acidic bodies which reduce silver nitrate, and the characteristic smell of these liquors is mainly due to butyric and valeric acids, the presence of which, on account of their reactive nature, is highly undesirable. It is therefore essential that in all enclosed type engines efficient ventilation should be provided when a circulating system of lubrication is employed. The less volatile acids are not very reactive, and although they do not appear to be directly indicative of the amount of asphalt or sludge which a given oil will produce, they are of a sticky nature, and when isolated rapidly polymerize to a resinous mass. In view of the proved fact that very small percentages of the higher fatty acids greatly improve the lubricating qualities of mineral oils under boundary conditions,[8] it was desired to ascertain whether the less volatile petroleum acids formed during the oxidation of mineral oils behave in a similar manner, or whether their presence is definitely undesirable.

A series of preliminary tests was conducted to gauge the relative effect of the lower and higher molecular-weight acids of the series $C_nH_{2n} + {}_1CO_2H$ and $C_nH_{2n-1}CO_2H$, and blends were made containing 1 per cent of crotonic, oleic, butyric, valeric, and palmitic acids, with a mixed base distillate oil, identified by the letter G. The mixtures, together with the mineral oil and pure castor oil, were tested on a Stanton Pendulum Ma-

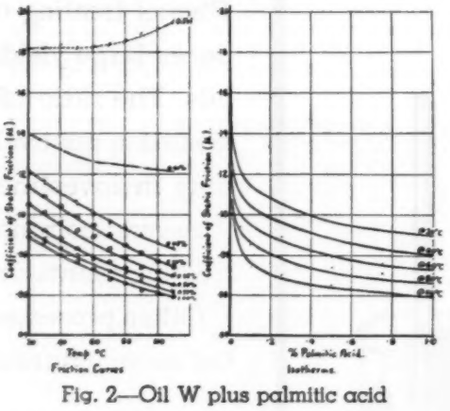


Fig. 2—Oil W plus palmitic acid

chine,[9] the load on the bearing being just over 2 tons per square inch, and the outstanding point noticed during this series of tests was the remarkable smoothness of the swing of the pendulum when running on the 1 per cent palmitic acid blend. There was a complete absence of "judder" when the motion reversed, and the tracings were very consistent, whereas with the other blends there was considerable difficulty in obtaining duplicate readings within a 3 per cent limit, and observation of the temperature during progress of the tests indicated that there was undoubtedly a slight, if not appreciable, variation of the coefficient of friction with temperature, on account of which it was decided to conduct further investigations on an apparatus where temperature could be carefully controlled, and where only a small quantity of oil—a few ml.—would be required to determine the coefficient of friction.

A simple and inexpensive apparatus was designed (Figure 1) in which a plane slider made of case-hardened steel was supported on three ordinary steel-ball bearings, which were contained in a steel cup and held in position by a bevelled locking-ring; if the surface of any of the balls became scratched, the locking-ring was released and a fresh surface was presented by slightly rotating the damaged ball. A guard ring controlled the lateral movement of the slider, preventing it from slipping entirely off the bearing surfaces, and so becoming contaminated. This apparatus was enclosed in a lagged metal box through which a stream of purified and dried air could be passed, and an electric heater was provided. The whole was mounted on a table which by means of a worm and wheel gearing could be tilted until the angle was attained at which slip of the glider occurred. Considerable difficulty was experienced in obtaining a satisfactory surface for the slider, and it was found that the best method of procedure was to lap the surface with flour of emery mixed with the oil the coefficient of friction of which it was desired to determine, subsequently washing the slider thoroughly with petroleum ether, refluxing with pure absolute alcohol, as it was found that petroleum ether by itself was incapable of completely removing a strongly absorbed lubricant from the bearing surfaces, and immediately after the alcohol film had evaporated, covering the surface with the oil under test; the ball bearings were similarly washed.

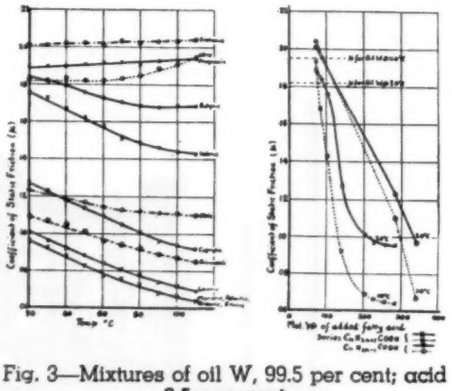


Fig. 3—Mixtures of oil W, 99.5 per cent; acid 0.5 per cent

TABLE 1—FRICTION TESTS—STANTON PENDULUM

| Oil— | Mm. decrease for 10 oscillations | Coeff. of friction, μ |
|---|---|---|
| Castor | 43.6 | .112 |
| Mineral oil "G" | 53.4 | .138 |
| Mineral oil + 1% oleic acid | 44.1 | .114 |
| Mineral oil + 1% crotonic acid | 42.4 | .135 |
| Mineral oil + 1% palmitic acid | 32.4 | .084 |
| Mineral oil + 1% valeric acid | 52.8 | .136 |
| Mineral oil + 1% butyric acid | 53.5 | .138 |

**Dr. E. R. Redgrove has presented here an unusually complete and timely discussion of the oxidation properties of motor oils. In this article he has stated the problem and has explained the procedure for making laboratory tests on a series of commercial lubricants. In a subsequent article, and as a continuation of this discussion, the complete results will be given**

In order to test the capabilities of the apparatus, it was thought desirable first to ascertain the effect produced by adding to a mineral oil increasing proportions of an acid known to possess in a high degree the power of reducing the coefficient of friction of a mineral oil; the mineral oil (Oil W) chosen for this series of experiments was a highly refined medicinal paraffin oil, and mixtures were made containing .01, .05, .10, .25, .50, .75, and 1.00 per cent of palmitic acid. On account of the low solubility of palmitic acid in the mineral oil, it was necessary to warm and vigorously to agitate the mixtures until they were homogenous before applying them to the bearing surfaces. The same treatment was applied to all, because even the .10 per cent mixture showed a faint cloud after standing for several days. The temperature/friction curves for Oil W and these mixtures are shown in Figure 2, and it will

* Part of paper presented at the 164th meet of the Institution of Petroleum Technologists, London, England.

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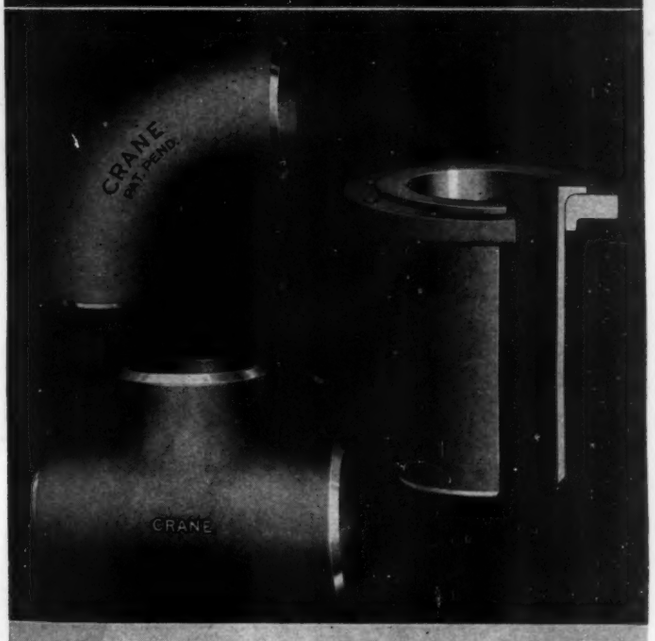


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at once be seen that the friction of the mineral oil at 20° C. is reduced 22 per cent by only .01 per cent of palmitic acid, and that the sharp rise in friction which occurs at temperatures above 70° C. is entirely eliminated. There is a steady fall in the coefficient of friction with increase of temperature of all the mixtures, as is clearly shown by the isotherms, and the trend of the curves indicates that when 1 per cent of acid is present the effect is approaching, but has not attained, the maximum. When more than .5 per cent of acid was present, the great oiliness of the mixture was very apparent, and it was sometimes difficult to decide exactly when slip occurred, because it was found that very slow movement (of the order of .001 cm. per sec.) took place at an angle of inclination corresponding to a coefficient of friction of .028. It is to be noted that the addition of only .01 per cent of palmitic acid to Oil W reduces the coefficient of static friction from .189 to .14, a figure comparable

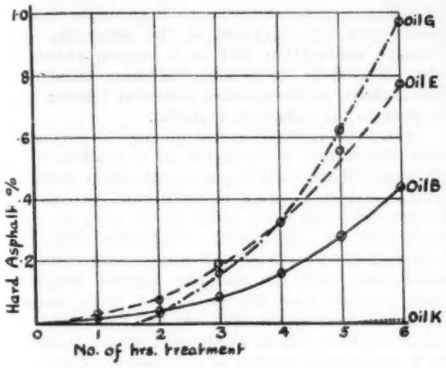



Fig. 4—Growth of asphalt

with the friction value of refined mineral lubricating oils, which usually contain acidity to the extent of about .012 per cent, calculated as palmitic acid.

The next step was to confirm the results indicated by the experiments conducted on the Stanton Pendulum, particularly that the lower molecular-weight fatty acids do not possess the power to effect any appreciable reduction in the coefficient of static friction of a mineral lubricating oil. In view of the sparing solubility of some of the higher molecular-weight fatty acids, it was thought desirable to use only .5 per cent of acid dissolved in Oil W. The acids chosen were propionic, butyric, valeric, caprylic, lauric, myristic, palmitic, and stearic, representing the $C_nH_{2n}+_1CO_2H$ series: crotonic, oleic, and erucic, representing the $C_nH_{2n-1}CO_2H$ series and the hydroxy acid, ricinoleic acid, $C_{17}H_{32}(OH)CO_2H$. The results obtained are given in Figure 3. There is no doubt that the acids, crotonic and propionic, tended to increase the static friction of Oil W, and this action may be due to a tendency of the acids to combine with the bearing surfaces by direct chemical union of the primary valency type; readings were difficult to obtain, were subject to wide variation, and movement of the slider was characterized by marked harshness. With increasing molecular weight of the added fatty acids there was a noticeable reduction in friction, "oiliness"

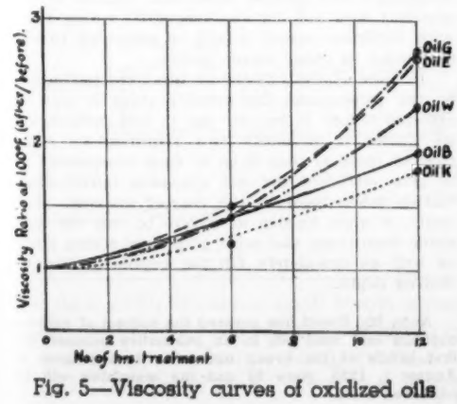



Fig. 5—Viscosity curves of oxidized oils

became more and more apparent, the very slow movement at slight inclination again occurred, and it was scarcely possible to differentiate between the results obtained with the palmitic, myristic, stearic, and erucic acid mixtures. Curiously

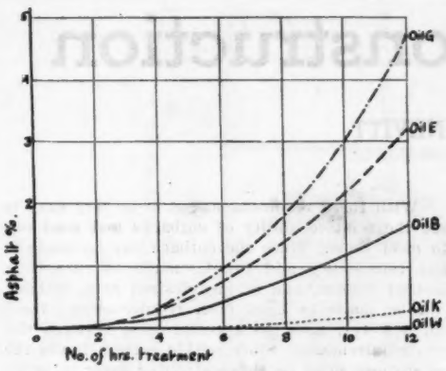



Fig. 6—Asphalt curves of oxidized oils

enough, the effect produced by the oleic acid was much less than might have been expected in view of the fact that the molecular weight of the acid is greater than that of palmitic acid. From observation of the motion of the slider the impression was gained that the property of "oiliness" was not very apparent, and if the expression may be used, the lubricant seemed unsympathetic to the bearing surfaces. In Figure 3, in addition to the friction temperature curves, the results are analysed with the view of showing the reduction produced in the friction of the mineral oil as a function of the molecular weight of the fatty acids added, and it would appear that the effect is closely related to the length of the hydrocarbon chain attached to the adsorbed polar group of the fatty acid, for, on referring to the calculations made by Langmuir,[3] it is seen that the length of the molecule of palmitic acid is very similar to that of stearic acid, and rather more than twice the length of the oleic acid molecule.

**TABLE 2—COMMERCIAL OILS USED IN OXIDATION TEST**

| Test— | B. | E. | G. | K. | W. |
|---|---|---|---|---|---|
| Specific gravity at 60°F. | .910 | .934 | .921 | .885 | .885 |
| Redwood I viscosity at | | | | | |
| 70°F., secs. | 1272 | 1542 | 1296 | 1002 | .... |
| 100°F., secs. | 411 | 442 | 441 | 362 | 364 |
| 140°F., secs. | 133 | 138 | 142 | 140 | 99 |
| 200°F., secs. | 53 | 51 5 | 56 | 57 | .... |
| Closed flashpoint, °F. | 390 | 375 | 445 | 410 | .... |
| Cold test, °F. | ... | ... | 23 | 28 | .... |
| Acidity, mgms. KOH per 100 gms. | 5 | 2 | 9 | 5 | 1 |
| Coke value, % (Ramsbottom) | .23 | .19 | .35 | .57 | .06 |
| Sulphur, % | .18 | .28 | 1.27 | .16 | .... |

In order to investigate the extent to which the acids formed during the oxidation of a mineral oil influence lubricating value, various specimens of commercial oils were subjected to treatment in the Air Ministry apparatus for periods of one hour and upwards; four typical types, also Oil W, will be considered. Oils B, E and G are distillate oils from Russian naphthene, asphalt, and mixed base crude, respectively, and K is a blend of distillate and filtered bright stock both from Pennsylvanian, paraffin base crude, the usual commercial tests of these grades being given in Table 2.

After each period of treatment, some or all of the following points were examined:—

(1) Increase in viscosity at 100°F.
(2) Percentage of hard asphalt formed.
(3) Ramsbottom coke value.
(4) Amount of acidity developed.

Observation of the rate of growth of asphalt is interesting, and would appear to be an indication of the care exercised in refining, quite apart from the ultimate chemical stability of the product. Figure 4 shows that after six hours' oxidation Oil K has only a trace of asphalt, whereas asphalt after only one hour's oxidation, an indication of unsuitable or incomplete refining which is also revealed by other methods. On the other hand, Oil G shows no asphalt whatever after one hour's oxidation; whether this unexpected behavior is due to the presence of some substance or substances which acts as inhibitors of oxidation, or whether skilful refining has overcome the inherent disadvantages of the crude, there is so far insufficient evidence on which to formulate a hypothesis. In contradiction to the behavior of Oil G, cases have come under notice in which the early rate of increase in asphalt formation has not been maintained. Figures 5, 6, 7 and 8 give the general deterioration curves of the five oils under consideration. Considering first the viscosity changes, the increase is in part due to evaporation, in part to polymerization, and in part to asphalt formation, but there is no definite relationship between viscosity increase and any one of the these three factors; so much depends on the type of crude, the degree of refining, and the nature of the constituents. While the asphalt curves are useful indicators of chemical stability in so far as most distillate oils are concerned, and there is generally a close relationship

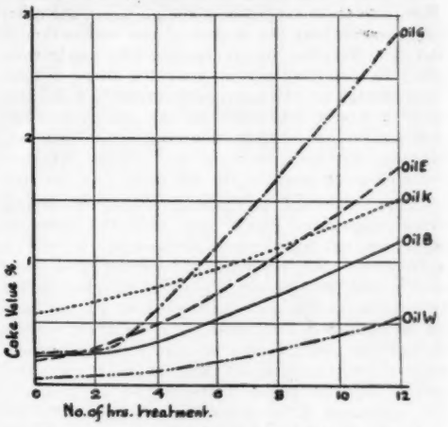



Fig. 7—Coke values of oxidized oils

between the curves for asphalt and coke value, the similarity breaks down completely in the case of oils containing residual stock because the residual stock, or similar product of low volatility, generally oxidizes to tar or pitch which may contain very little asphalt, although possessing a high coke value.

Visual examination of the various samples of oxidized oils showed that there was a considerable difference between the four types in respect of their ability to hold in solution the asphalt formed from them during their decomposition, and the oils were examined microscopically, the degree of magnification being about 350. Oil B is showed a separation of solid material after two hours' treatment when the hard asphalt concentration was only .047 per cent. Oil E after two hours' treatment showed no separation of solid material, although the hard asphalt content was .078 per cent. Oil G is rather remarkable in respect of its asphalt-forming characteristics. After one hour's oxidation no asphalt whatever is formed, and there was a visible precipitation of asphalt only when the percentage present has reached about .6.

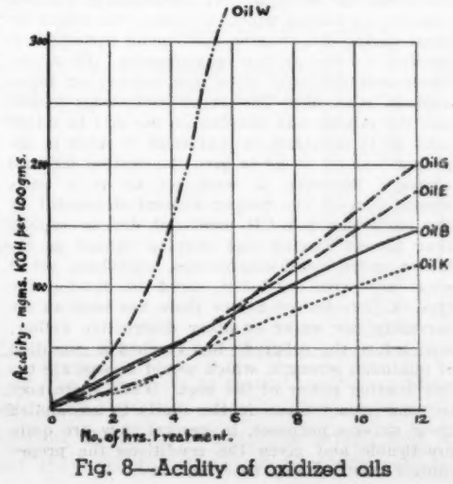



Fig. 8—Acidity of oxidized oils

# Asphalt and Road Oils for Highway Construction

By H. G. NEVITT
Socony-Vacuum Oil Co., Inc.

AFTER CONSTRUCTION IS finished and the road is compacting and curing, undesirable action may occur if material is not of proper characteristics. There is still a tendency of the liquid asphalt to migrate into the base or to the surface, depending upon a number of factors. These are the consistency of the material, the quantity present, and the degree of the compaction of the mat. Material that is too thin will slowly work away by capillary action, provided there is more than enough on the aggregate. There is a limiting film thickness, dependent on the viscosity, which will not be lost by migration; but below such consistency the excess between the particles, which is being counted upon to fill the voids, may be lost.

This action will be assisted by compaction with dense aggregates which may have the effect of squeezing out any excess bitumen if the mix is sufficiently rich, resulting in bleeding. The usual action, and the only one often kept in mind during the curing period, is a hardening of the bitumen or its consistency increase as a result of several factors provided they are present. First is the volatilization of the light oil components, if any; second is the absorption of the lighter fractions by the aggregate, or perhaps the adsorption on the surfaces of the asphaltic constituents, provided that in either case the aggregate is of such type. Whether or not this adsorptive action affects either hardening or migration is not definitely known—it may not be a very important effect in mats although considerably so in priming. The loss of nonasphaltic material and the effect of absorption or adsorption neutralizes the consistency effect of the asphalt in some aggregates, and must be kept in mind in considering quantities. Some of the phenomena previously discussed, such as the migration tendency, will evidently be influenced by the rate of hardening. This will also affect the resistance of the mat to water action. Water attacks mats by the physical action of emulsification, and by chemical attack. If the bituminous films are sufficiently thick, and develop sufficient stiffness and mechanical strength before there is serious water encroachment, they will probably resist the water action; but if they do not develop such characteristics, or develop them so slowly that water has been able to get in its destructive work first, water trouble will develop.

WITH AN OUTLINE OF THE functions the material left permanently perform and the tendencies which influence this liquid asphalt during construction and curing periods, it is possible to specify its requirements. These are fundamentally two. First the binder, or liquid asphalt, must have the proper consistency to permit the mixing and shaping of the mat in mixed jobs, or to penetrate in that class of work in the proper amount so as to give the desired bitumen content. Secondly, it must set up to a hard, strong film of the proper amount demanded by the particular job. It must not dry so rapidly that correct mixing and shaping cannot be obtained under usual construction conditions, yet it must dry with sufficient speed to develop the type of film desired before there has been an opportunity for water or other destructive action; also before the subgrade has reached a condition of minimum strength, which would necessitate the full bearing power of the mat. While there may be some compromises in the limits to accomplish these various purposes, in general they are quite practicable and given the conditions the proper control features may be established.

With these requirements set it is very easy to see the relative ability of cutbacks and road oils to meet them. Since the cutback can be made to any consistency and can be made to cure to a desired residue, and at any desired rate, cutback can be made to meet both requirements. Road oil, however, must be a compromise between the two requirements. Since within certain limits the consistency must be the controlling actor in order to get the mat built, the strength and thickness of the film must in general be sacrificed accordingly. The only way to obtain the two together is to resort to the hot mix type of construction, or to sacrifice the convenience and economy of the usual forms of liquid asphalt construction by unduly raising the viscosity of the road oil in order to somewhat improve the film strength. In addition to this primary result of the use of road oil, namely a loss of mat strength, there are secondary effects. The thinner and softer films obtained decrease the resistance to water, and also to chemical action.

A DISCUSSION OF PRIMING materials is in order. The duties performed by the primer and the functions of this residue are the most numerous and difficult of any of the work done by liquid asphalts. The first of its residual functions is to waterproof the base so as to prevent water trouble in the mat, this being the greatest source of expense in bituminous treatments. To obtain this waterproofing and impervious film, with mechanical characteristics that will both prevent and continue to prevent passage of water into the mat from the subgrade, must be obtained. The concept that a continuous layer of asphaltic material on top of the subgrade will bring about such an effect is entirely erroneous. Assuming such a layer could be established, movement of the mat and the subgrade would soon result in its breakage. The only feasible waterproofing film is a layer of subgrade material completely saturated with bituminous material giving essentially the equivalent of a plastic layer, which will still maintain its continuity in spite of movement, frost-heaving, and similar. Whether or not such a layer is always possible to obtain is a question but in the great majority of cases it is practicable, and the position can be taken that the primer should result in such a layer.

In addition to waterproofing the base, the primer should form a bond between the subgrade and the mat. While not generally realized, the surface of a highway is subject to many horizontal stresses which must be transmitted by the mat to the base. If the base is sufficiently rough, friction and an interlocking may take care of this. It is better not to count on this effect as it is often not present, but depend upon the primer to cement the base to the subgrade and to give a penetration into the subgrade that will prevent the formation of a sharp line of demarcation between the presumably water-tight mat and the easily saturated base. There is always a possibility of such abrupt change resulting in a plane of slippage, and this should be avoided unless the effective thickness of the mat is such as to make it immaterial.

A third, and economic, function of the primer is to increase the effective thickness of the mat, particularly if the surfacing obtained is of a strong semiflexible type. If this result is obtained the load-carrying capacity of the surface is greatly increased, and in the case of extremely thin mats on low traffic roads the factor of safety against trouble from the occasional heavy load is greatly increased. An occasional duty, though not a regular function of the primer, is to consolidate loose material in the subgrade so that it will not form an area of weakness under the mat, or mix with the mat during construction. The final and extremely necessary function of the primer is to maintain its ability to perform all the functions listed by being physically and chemically stable; consequently, resisting water and other action.

We will next survey the action of a primer which is used with the intention of performing these functions. First it must be below a certain consistency at the road temperature, or penetration will not be obtained. With most subgrades this means a very thin material is necessary. If, however, the consistency is set too low the liquid asphalt will tend to be quickly drawn further down in the subgrade than is desirable, leaving too little in the proper priming area or necessitating additional priming material to make up for the loss; consquently there will be a lower limit of consistency for the primer. Both limits will depend upon the tightness of the subgrade. The relative penetration will to a certain extent be also affected by the penetrating characteristics of the asphalt, or its so-called adhesion tension with respect to the subgrade material.

After the application and during the curing period the primer is subjected to a number of influences. There will be a considerable tendency of the material, which must be thin, to continue to penetrate into the subgrade or even to work back into the mat, with undesirable effects in either case. This tendency will depend upon the consistency and the quantity present which in turn depends upon the amount of voids present, as in the case of the mat. At the same time the liquid asphalt will be hardening, if able to do so, as a result of a number of influences. There will be volatilization of the lighter oil components. There will tend to be adsorption of the light oil components into the subgrade particles and with some subgrade materials, and adsorption of the asphalt component onto the surfaces of the subgrade particles with others. There will be some tendency for a differential penetration, possibly as a result of this adsorption of the asphalt, resulting in the movement of light oil components ahead of the asphalt into the subgrade. This effect similarly to or because of the results from the adsorption action, will depend upon the subgrade material.

AS A RESULT OF REMOVAL of the non-asphaltic constituents by evaporation or adsorption, there will be a decrease in the film thickness. The migration tendency first discussed will evidently be influenced by the rate of hardening. If the material hardens very slowly there will be a tendency for capillary action to carry it too far, or for the smaller capillaries with their higher capillary tension to draw upon the liquid in the larger capillaries, thereby leaving them open and free to admit water. If on the other hand the rate of hardening is too rapid the primer will become hard, only going down sufficiently to effectively hinder the penetration of further material which will therefore tend to dry on the surface, giving a rich undesirable surface layer rather than a thoroughly penetrated and primed subgrade. Finally if the material does not dry to form stiff, strong films with sufficient speed, it will be subjected to displacement or other water action.

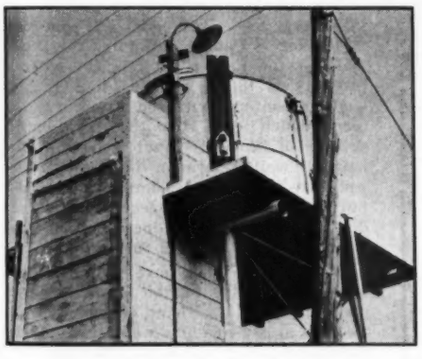
In spite of the number of functions performed by the primer and the possible ways it may be affected before it has set up, it will perform all its duties if it meets two requirements. The first of these is that it be of such consistency as to give sufficient but not excessive initial penetration when used in the correct amount. Secondly, it must harden at a rate to suit the subgrade conditions, and must give hard strong films as well as completely fill the capillaries to the desired depth.

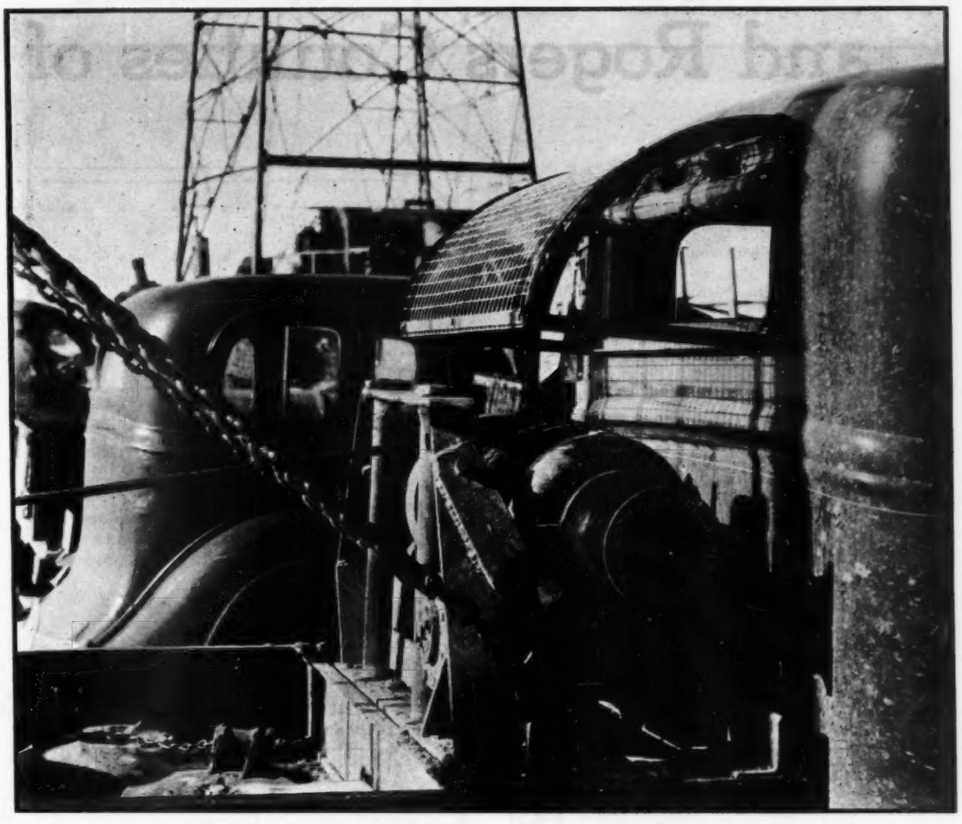
**Note: Mr. Nevitt has covered the subject of cutback asphalts and road oils in an exhaustive manner, the first article of the group appearing in the issue of August 1, 1935, page 34 and the remaining will be published soon.**

# OPERATING IDEAS

## Night Gauging Light

Knowing the water level in a tank at night as well as in day time is an important item in operating engines. Here a float is attached to a marker that slides in a grooved board graduated in feet and inches indicating the level of the fluid within the tank. It is easy to see the position of the marker on the side of the tank during the day but at night it would be necessary to climb to the top of the structure to make observations. To eliminate this climb a common red tail light glass for an automobile is attached to the wooden marker. Originally a flash light beam was played upon a red glass but now an electric light is used. The pipes leading to and from this tank are enclosed in a wooden box filled with insulating material to prevent freezing



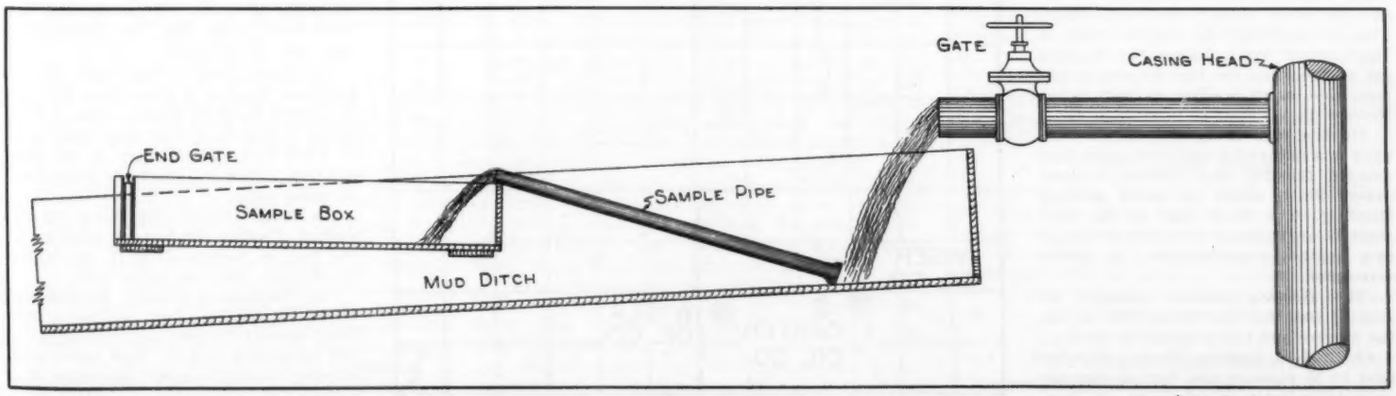


## Metal Shield Protects Winch Operator on Truck

Photograph shows an oil field truck with winch attached for loading and unloading heavy drilling tools. Most trucks operating with winch have the back of cab covered with iron bars making it necessary for the operator to get out of the cab to re-arrange line in case of tangling or kinking. On the truck pictured, which is used in the drilling department of one of the major companies, a steel shield is built on the back of the cab to protect the driver and still allow him to reach his line without leaving the cab of the field truck

## Simple Method for Securing Sample of Rotary Cuttings

In drilling a hole in the earth's crust by any method it is desirable to secure samples of the formations penetrated. With cable tools a portion of the material brought up in the bailer is saved. In rotary drilling a sampling device may be made by the crew and the accompanying cut shows one of a practical nature. The mud returns flow from the pipe into a wooden ditch. Across this ditch at a convenient place down stream, a small box is mounted. A piece of 2-inch pipe with a swage nipple on the lower end is placed in the wooden flume and the upper end rests on the upstream edge of the sample box. When the mud flows in the mud ditch a portion will flow through the 2-inch pipe and carry cuttings into the sample box from which they can be removed from time to time. To clean the sample box a gate at the lower end may be removed. There are many other types of samplers but they are for the most part very crude



# Five-Spot Flooding Applied in Nowata and Rogers Counties of Oklahoma

THE ENTRANCE OF THE Forest Producing Corp. of Bradford, Pa., into the water flooding activities of northeastern Oklahoma calls attention generally to operations of this kind. Most of this work is still regarded as being in the experimental stage. The oldest systematic water flooding project in the Nowata area is not more than four years old.

The first systematic flooding there was commenced in 1931 at the Carter Oil Co.'s Hall lease in Section 22-24-16, Rogers County, about 3 miles southwest of Alluwe. This lease was purchased in 1926 by the Carter Oil Co. for the purpose of mining oil. No mining was done. In 1931 a small water drive was started on the lease by the late Burt Collins, with whom the Carter Oil Co. had entered into a contract providing for his acquiring a half interest in the property if the venture succeeded. The results of this first trial were encouraging and in 1932 the water project was enlarged. On the death of Burt Collins, that same year, the operation of the lease came into the hands of Donald Oak, who continued to manage it until 1934 when the Carter Oil Co. regained entire possession of the property through purchase of the outstanding half interest.

In 1931 the part of the lease, selected for flooding, was making only 6 bbls. a day; in 1934, production from this part was 80 bbls. per day. Flooding was started on 30 acres and subsequent developments have been extended to include the remaining 80 acres of the producing area on the lease. Today the daily production is about 70 bbls.

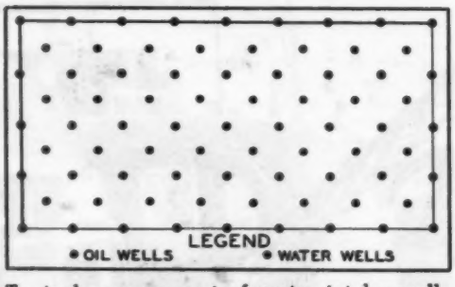
There are 44 intake water wells taking from 2,000 to 2,200 bbls. of water a day at 275 pounds pressure. Water is piped from the Verdigris River. Suspended matter is removed by settling and filtering through sand and the water is treated with alum and lime.

The locations of the water wells do not follow a true five-spot pattern in as much as the project was commenced by fitting water wells to old oil wells. In general there has been a more or less regular spacing of 220 feet between water wells. Production comes from 30 feet of Bartlesville sand; top of sand 380 feet, bottom of sand 410 feet.

The five-spot pattern for placing wells in water flooding takes its name from the five spots on dice—the oil well, or five-spot, being in the center and the water wells at the four corners. The five-spot pattern adapts itself to small leases for it brings the flooding out to the line. On this account it has been used on all flooding projects in the Nowata Field.

On the Hall lease, the Carter company has followed a policy of using both delayed flooding and flooding without delay, which might be called straight flooding. The work done at the Hall lease is an example of flooding started in a small way and extended as results warranted.

The flooding project managed by Donald Oak for the Walter Oil Co. on the Meyers and Coker leases in Sections 1 and 2-26-16, Nowata County, was the first to be planned and carried through on a large scale in this area—in fact, the first in the Mid-Continent Field. This lease was purchased in 1933 by H. J. Walter, of Bradford, Pa. The program called for drilling 22 intake wells, and on August 1, 1934, water was turned into all of them. The first increase was observed in February, 1935, and the production this month shows an increase of several times the production before flooding started.




Typical arrangement of water intake wells and oil wells for five-spot flooding

Production comes from two lenses at 480-95 feet and 500-20 feet. Both lenses are flooded. Surface water is used from wells 50 feet in the gravel. Water is filtered and treated with alum.

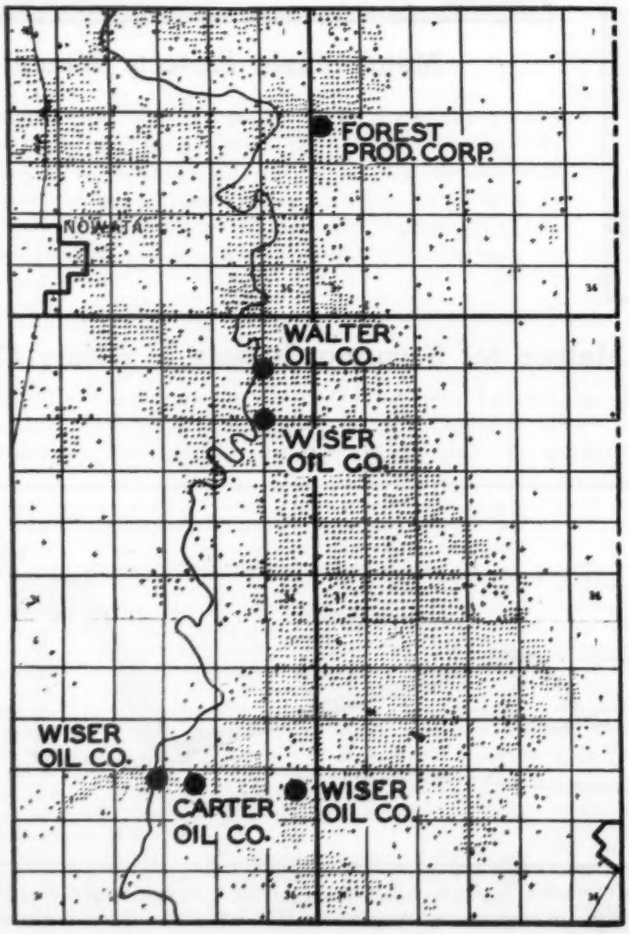
The Meyers and the Coker leases, together, comprise 160 acres. The spacing of the water wells is at 440 feet, giving 4 4/9 acres in the five-spot. Three more water wells have been drilled bringing the total to 25 at present. A combination of delayed flooding and straight flooding has been used. The two methods have been used in a 50/50 proportion. Where delayed flooding was applied, eight old producing oil wells were plugged as soon as they showed an increase after the flooding started. These wells were plugged to produce a more complete saturation of the sand with water at a higher pressure. This project is the outstanding experiment in systematic flooding in the region.

More recently the Wiser Oil Co. has started experimenting with flooding not only in Nowata and Rogers Counties but in other areas, in accordance with the company's policy of constantly testing methods for secondary recovery.

Preliminary work has been done on the Anna Milam lease in Sections 12 and 13-25-16, Nowata County, to see how the sand takes water.

This testing program includes 12 water wells and 1 oil well at the start. Another oil well is required at a part of the lease where the old oil well does not fit in with the five-spot pattern. The sand is 20 feet thick at a depth of 500 feet. Surface water is pumped from the gravel at 30 feet, and it is to be filtered and treated with lime. Indications are that the pressure to be used here will be about 375 pounds.

On the Wiser Oil Co.'s Ruth Allbury and Daisy Daugherty leases in Sections 21 and 22-24-16, Rogers County, adjoining the Hall lease of the Carter Oil Co., the entire property is to be redrilled to get the wells to conform with the five-spot pattern, which calls for the immediate drilling of 37 water input wells and 26 new oil wells. Two of the present oil wells are to be retained for experimental purposes. Sand is 18 feet thick at a depth of 450 feet. Nothing has been decided yet as to treating the water.




Location of water flooding operations in the Nowata stripper well area of Oklahoma designated by large dots

It is planned to have two drilling machines working on the lease to complete the wells in about eight months. As soon as six or eight wells have been finished flooding will begin. No delayed flooding is to be used. On these leases as well as on the Anna Milam, a spacing of 330 feet has been adopted, however, there is a possibility of changing to 440 feet and more.

Two miles east on the Simpson lease in Section 24-24-16, the Wiser company has been testing the sand with four water wells around a central oil well. Results have shown that 750 pounds pressure will be required.

In Creek County, the Wiser Oil Co. has been flooding a lease since last fall in Section 33-17-11, Pickett Prairie Pool, where it has 25 feet of Red Fork sand at 1,700 feet. Here there is no five-spotting; three old oil wells were used as water wells.

In Osage County, the Wiser Oil Co. started flooding 40 feet of sand at 1,000 feet in Section 27-29-11, on March 10, through just one water well.

In Chautauqua County, Kansas, the Wiser Oil Co. has been making a line flood test of 18 feet of sand at 1,600 feet in Section 6-35-12. Salt water used is being treated to retard corrosion. The company is contemplating another project where five-spotting with 440-foot spacing will be carried on in the Osage.

The Wiser Oil Co. expects to use five-spotting eventually on all projects with the exception of the one in Creek

County. The Wiser Oil Co. has no results to announce as yet from its experiments.

The Carter Oil Co. and the Walter Oil Co. make a practice of pumping water to the sand through 6¼-inch or 6⅝-inch casing set in cement on top of the sand. The Wiser Oil Co. does this and also has a number of wells equipped to pump the water through 2-inch tubing cemented on top of the sand for the sake of economy in the initial investment.

It is observed that the Forest Oil Corp., the latest one to enter flooding operations in this section, has a number of procedures which are different from those used there heretofore.

For casing, the Forest Producing Corp. uses the National Tube Co.'s 5-inch cement lined (minimum thickness of cement .187 inch), 12.8-pound lapwelded Duroline pipe to prevent formation of iron oxide, due to the action of the water on steel. This 5-inch casing is cemented on top of the sand and the 6⅝-inch pipe used in drilling is pulled. Line pipe is also cement-lined. Instead of using river water or surface water, the Forest Producing Corp. will take salt water from a 1,430-foot well drilled to the Arbuckle or Wilcox formation, as it is called in this section. No announcement has been made as to the method of treating it.

The flooding activities of the Carter, Walter, and Wiser companies have been in the southern part of Nowata County and across the line in Rogers County, where the sand is shallower, thinner, tighter, and tends to pinch out. In contrast to this the Forest Producing Corp. has selected an 80-acre tract for its first flooding operation which is north of all the other water projects in the field. This 80-acre tract, the Della and Rufus Allen lease in Section 18-26-17, instead of being a marginal producer, is considered locally to be one of the best parts of the producing acreage of approximately 5,000 acres with about 900 wells which the Forest company recently purchased from the Warner-Caldwell interests.

Furthermore, the Forest Producing Corp. has proceeded to plug all producing wells and has commenced to drill 45 water intake wells in a five-spot pattern covering the entire 80 acres at intervals of 330 feet between intake wells. Nine drilling machines have been contracted to drill five wells each. Drilling is delayed now by slow delivery of pipe.

When sufficient water shall have been pumped into the sand to build up the pressure, 32 oil wells will be drilled on the five-spot locations. This is the delayed flood system.

Outside of the Nowata Field there are a few flooding projects planned and going forward. Among these are the experiment of the York State Oil Co. with headquarters in Ripley, N. Y., and an office in Caney, Kans. This test is being supervised by Dr. George H. Fancher, who is on leave of absence for a year from Penn State College. The York State Oil Co. is starting flooding with four water wells and one oil well in one five-spot on a lease taking in approximately a section in the Golden Lane Pool in Greenwood County, Kansas. The source of water is a pond. The pressure is hydrostatic in wells about 2,000 feet deep. The economics of the situation do not permit delayed flooding. The water is treated with alum to remove solid matter.

The Shell Petroleum Corp., Phillips Petroleum Co., and Sinclair Oil & Gas Co. plan a test on a unitized block in Osage County, Oklahoma, where the sand is 100 feet thick and from 1,500 to 1,700 feet deep. Old oil wells drilled in 1907 will be used for the test.

The Indian Territory Illuminating Oil Company and many other companies have been studying water flooding, but so far no definite plans have been approved.

On the basis of results obtained in Pennsylvania, it is possible that a large amount of oil may be recovered from fields north of Tulsa. At the present time, economic factors connected with the price of crude are going to require careful study. The sand of northeastern Oklahoma is more permeable and more variable than the sand at Bradford, where it has been found that uniformity of permeability is an advantage in flooding. In the Oklahoma shallow field the sand is not as deep and therefore the initial cost of development will be lower.

# Pressure-Type Tanks Augment Water Transportation Facilities in Winter

New 60,000-bbl. spheroid built for Socony-Vacuum. From this storage gasoline will be supplied during the winter months when water transportation is impossible

MUSKEGON, Mich., Aug. 3.—In the past week the Socony-Vacuum Oil Co., Inc., completed the erection of two large spheroid steel tanks near this city, the new western Michigan terminal of the White Star Division. The two spheroid tanks, one with a capacity of 80,000 bbls., and the other 60,000 bbls., augmented by a 7,700-bbl. cone-roof type tank already in use, will be used to supply service stations within a radius of about 100 miles by rail or motor truck.

A comparatively recent development in gasoline storage, the two tanks are the first of their type to be erected in Michigan; each covering about one-fourth of an acre of ground and standing about 40 feet high. They will be filled during the summer months, while water transportation is possible. Six-inch pipe lines have been laid from the tanker wharves to these tanks. The gasoline is held in storage until transportation by water becomes impossible.

These spheroid tanks are designed to withstand 1.5 pounds pressure; the shape of the tank tending to equalize the pressure so that the weight of the liquid contents exerts the same stress on all sides. Howard E. Coffin, general manager of the White Star Division, explained this with the illustration of a bag of water placed on the ground: "The weight of the liquid pushes the bag out into the shape of a spheroid as it seeks to exert the same pressure on all sides," he pointed out. "Our new tanks are designed on the same natural principle; they are shaped like giant pumpkins to equalize the pressure." Mr. Coffin declared that the new spheroid tanks conserve the quality and "freshness" of the gasoline, reduce evaporation and handling charges materially, and cut the fire hazard to a minimum.

Special safety devices in the form of pressure-vacuum vents are located on top of each of the new tanks. These vents are set to open at certain, predetermined points to relieve the pressure in the tanks; however, the pressure rarely reaches the predetermined points except when the tanks are being filled.

The terminal, which is located on a 16-acre plot near the Muskegon City limits, also includes an office, a battery of smaller truck-loading tanks, a steel warehouse, a loading rack with a capacity of "spotting" 10 cars, and a mile and a half of double 6-inch pipeline to a private tanker wharf on the $2,500,000 local harbor, one of the largest on the Great Lakes. Socony tankers dock at this wharf every few days and unload gasoline for the terminal. The tankers pump the gasoline from the wharf through the 6-inch line to the giant tanks located 1½ miles away. The "New Haven Socony" and "Poughkeepsie Socony," which are supplying the terminal at the present time, each have a capacity of approximately 650,000 gallons.

## Asphalt Paving in Kansas

Approximately 200 miles of heavy-duty bituminous mat pavement will be added to the Kansas highway system immediately at an estimated cost of $5,000 a mile. Actual costs probably will be less than that figure when competitive bids are received early in August.

Of the 39 approved projects, the Low Cost Roads Association reports, more than half are for the heavy mat surfacing on both the main state highways and the farm-to-market system. Other projects include the elimination of railway grade crossings, laying of light-type surfacing, grading and culvert installation. Employment will be provided for between 1,500 and 2,000 men on the relief rolls, the relief administrator said, and work should begin early in September.

## Alloy Data Book

Maurath, Inc., has just issued a "Price List and Alloy Data Book" that will be of value to all welders. All alloys produced by the various manufactures along with the complete analysis and proper electrodes for welding are clearly tabulated.

This book may be obtained by writing to Maurath, Inc., 7309 Union Avenue, Cleveland, Ohio.

## Petroleum Engineering

University of Illinois, Urbana, Ill., has established a new course in petroleum production engineering to start this fall. The first two years conform to the outlines of courses offered in the mechanical engineering curriculum and the last two years are devoted to special subjects.

# TIMKEN

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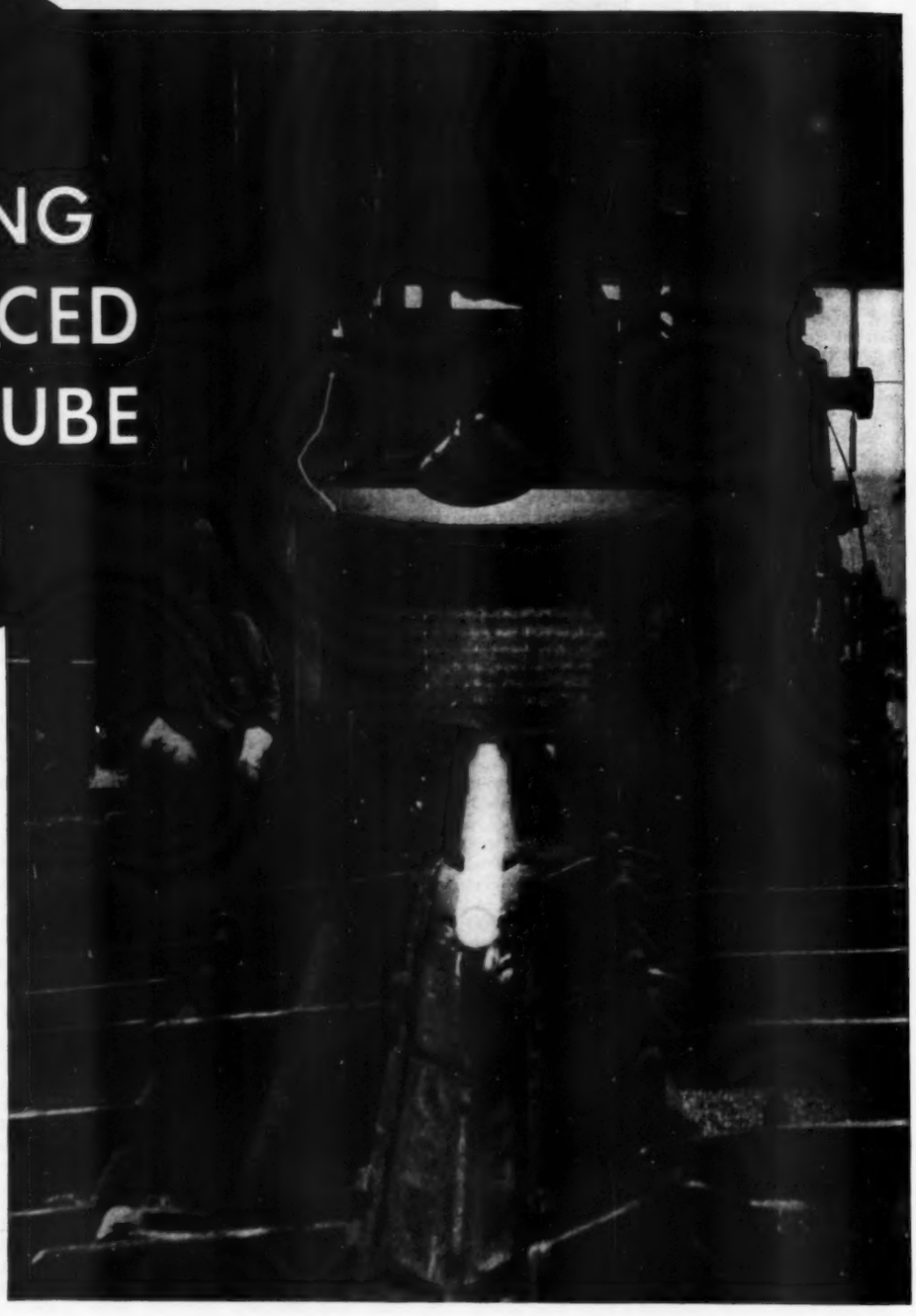

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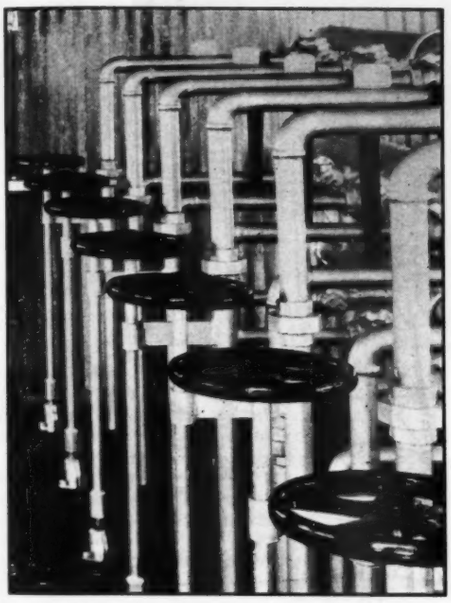
# Kettleman Gasoline Plant Capacity Is Increased by Adding Two Units

*By L. P. STOCKMAN*

THE SUPERIOR OIL CO. has recently completed the construction of a new high pressure gas lift compressor plant and the remodeling and extension of its original low pressure compressor plant on the Huffman lease in the Kettleman North Dome Field. The new high



Control valves in gas lift plant

pressure plant is designed to compress approximately 8,000,000 feet of natural gas per day, with an intake pressure of 450 pounds and discharge pressures approximating 800 to 1,200 pounds for normal operation and 2,000 pounds for kick over service as required. This new plant, operating in conjunction with the low pressure units, is so designed that seven 190-horsepower compressor units can be installed, although only two were installed in the first expansion job just completed.

There are six 200-horsepower units now operating in the low pressure plant and two in the high pressure plant. The units installed in the new high pressure plant were Ingersoll-Rand Type 6XVG gas engine driven compressors. New cooling water pumps for both the low and high pressure plants were installed in the high pressure plant. The pumps for cooling tower water and jacket water service are mounted on one bed plate and are directly connected to a six-cylinder Hall-Scott gas engine. A duplicate unit was installed for stand-by purposes. The building is of structural steel frame, covered with corrugated iron. The arrangement of the windows is such that the maximum light is admitted into the building and on the machinery. The sash is continuous around the entire building, including the doors, allowing sufficient light even on the cloudiest days without the use of artificial light.

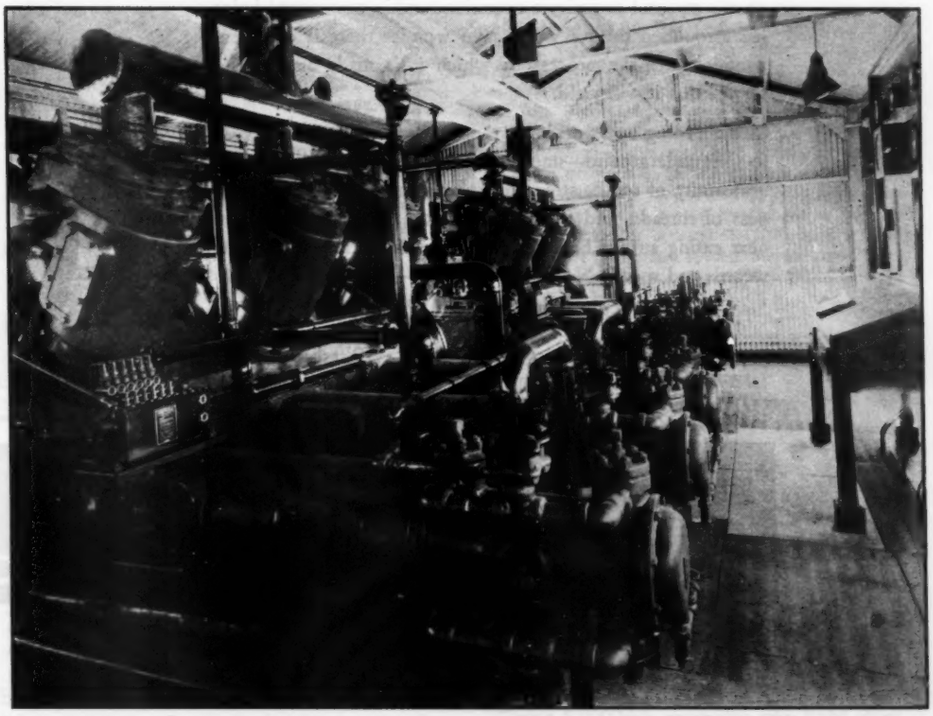
Piping for the entire plant is laid in concrete trenches and is so arranged as to enable easy inspection and maintenance. The main gas headers are all located in a large concrete trench outside of the building. From this trench the gas discharge lines are run to a separate metering station located approximately 50 feet away. In this header house the gas is metered and controlled to each well, there being eight flow lines emerging from this control house to the various wells on the lease. The gauges and meters are set opposite and toward the control valves which enables the operator to direct and control the flow of gas to any one of the wells without leaving the building.

All gas scrubbers are equipped with a liquid level control operating an electric siren. In the event a greater amount of liquid enters the scrubber than can be drained off, the siren warns the operator so the units may be shut down before any damage is done to the compressor cylinders. The jacket and cooling tower water circuits are also equipped with mercoid switches operating sirens to warn the operator in case the water levels get below a certain point. This eliminates any possibility of operating the units without sufficient cooling water.

All gas discharge lines from the units are equipped with large relief valves set on the outside of the compressor building and venting above the roof. All of the compressor and auxiliary units are equipped with air-cooled mufflers which add to the comfort and safety of plant operators. The jacket water system is of the closed type. The atmospheric coils for cooling the water are located in the base of the cooling tower. The surge tank used in the jacket water systems was constructed of reinforced concrete and because of the disintegrating action of raw water, the cooling tower basin and jacket water surge tank were lined with one-half inch coat of emulsified asphalt.

The new plant was so arranged that the capacity can be greatly increased without changing or moving any of the present equipment if necessity demands. The new aerator cooling tower was installed to cool the jacket water and the low and high pressure gas from both plants. Remodeling work on the low pressure plant consisted in installing air-cooled mufflers on all units, changing the ventilating system on the building and also changing some of the gas compressor cylinders and piping. This job represents a large investment and required about three months to complete. S. F. Magor, engineer for the Superior Oil Co., directed the work, which was completely designed and constructed by the Fluor Corp.

The cooling tower is a coil type, 50 feet long, and contains Griscom-Russell atmospheric type coils for cooling absorption oil and jacket water. All of the equipment being moved from Seal Beach to Montebello will be reconditioned and modernized so that upon completion of the new plant it will be modern and efficient in every respect. A new water well will be installed to give an ample supply of water to the new plant. A complete new boiler plant is being installed by the Oil Fields Construction Co. to supply steam for the new gasoline plant and complete storage facilities for raw and finished natural gasoline and absorption oil are also being constructed. A new gas gathering system is being installed to take natural gas from the present and future wells to be drilled or contracted by this company. The plant, when completed, will represent a substantial investment and should be in operation about August 15. H. R. Linhoff, manager of the gas department of the Richfield Oil Co. is serving as consulting engineer for the Universal Oil Co. and the field work is under the direction and supervision of D. M. Hodges, with all engineering and construction being done by the Fluor Corp. The natural gas in the Montebello extension is very rich as a recent survey showed a natural gasoline content of better than 3 gallons of gasoline to each 1,000 feet of natural gas. The Universal Consolidated Oil Co. now is drilling ahead in one hole and rigging up rotary equipment preparatory to spudding in another.



Part of compressors in Superior Oil Co.'s new gas lift plant in Kettleman North Dome Field. These compressor units will handle 8,000,000 feet of gas daily

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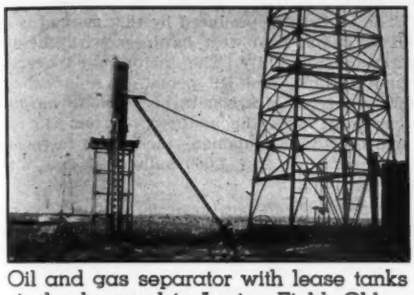
# Gravity Gathering Systems Aided by Following Natural Stream Channels

*By L. G. E. BIGNELL*

A GOOD EXAMPLE OF A gravity gathering system is to be found in the Lucien oil field, Logan County, Oklahoma, where the Shell Petroleum Corp. has applied the rules for laying out such a system to good advantage. This field is approximately 5 miles long and the major axis of the structure lies in an approximately north-south direction. The discovery well



Oil and gas separator with lease tanks in background in Lucien Field, Okla.

was located at the north end of the field and development has been toward the south. A large portion of the oil-bearing acreage is unitized and the wells drilled with 10-acre spacing.

Soon after the first well was completed a map of the surface was prepared and it was found that a high existed in approximately the center of the field. This caused the gathering system to be divided into two parts. The north portion is served by a pipe line gathering system that delivers all oil into a central battery of tanks and from there it is pumped over the central high to join with the oil from the south portion. All the oil finally enters the trunk pipe line which passes near the south end of the field.

At each well a high pressure oil and gas separator has been installed and erected upon a structure high enough to permit the oil to drain by gravity to a battery of low 500-bbl. capacity lease tanks. These tanks are gas tight and equipped with pressure and vacuum valves so that evaporation of light fractions of the oil is reduced to a minimum.

Each battery of lease tanks is located so that the oil will flow from the lease by gravity. The oil is next gathered in three 5,000-bbl. capacity tanks located on the east side of the field. From this point the oil is moved by pumps to the south end of the field.

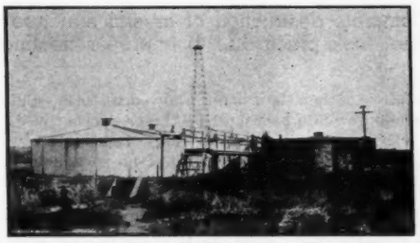
In planning this system one error, common to the laying out of gathering systems and branches upon the side of hills, was avoided. The system takes advantage of the natural slope of the surface but avoids the high points between tanks and pipe line terminals that would cause the oil to flow above the hydraulic gradient line. The pipe line is also laid with the minimum of sharp bends or elbows and with the pipe of more than the required diameter to reduce friction losses to a minimum. Oil of this character will deposit paraffin and sediment on the walls of the pipe if flow velocity is low and when this deposit accumulates for some time the internal diameter of the pipe is reduced and free flow impeded.

When a well is completed opening a new pool one of the first problems facing the owner is pipe line connections. Before the well is drilled in it is usual practice to set a battery of lease storage tanks to handle the oil. They may be set at some convenient place near the well selected by the drilling superintendent, or they may be set at some predetermined location selected because it will fit into a planned gathering system.

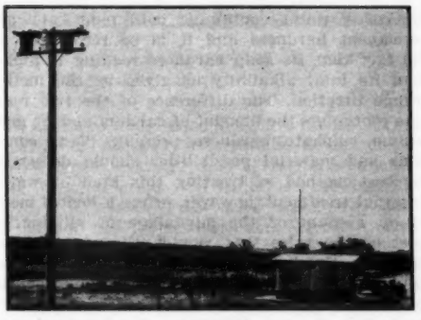
The gathering system may be of the gravity type or one to collect the oil by the use of pumps, or a combination of both. Modern pipe line practice recognizes well-defined rules to be applied to the gathering of oil from a pool and well organized producing companies usually plan their gathering system in advance of completion of the first well.

Most oil fields are located in an area that will lend itself to the adaption of the gravity system. The first requisite in laying out such a system is a survey of the land and mapping same to show contours of elevation. Such a map will indicate natural drainage channels. Another way to accomplish the same results is to take aerial photographs of the region and from same trace drainage channels. The mapping after survey is the simplest and the one usually followed.

The structure on which the oil field is located is usually reflected in some degree in the surface of the land. Weathering of the surface produces



Battery of low 500-bbl. capacity gas tight tanks for storage in Lucien Field



Transformers and electric pump station moving oil to storage in Lucien Field

natural stream channels and it is found these streams will form a pattern of drainage that can be adapted to the laying out of the pipe line gathering system.

It may be the entire field can be served by one system of pipe lines, or it may be necessary to divide the productive area into two or more systems. The probable extent of the producing formation is determined from data prepared by the geological department of the producing company and these data are usually available to the producing and pipe line department. They can be utilized in the planning of the gathering system and the contour map of the surface can be marked with a line that will include the probable area in which the production will be found.

One of the most troublesome features of gravity lines is air pockets. If all of the line is not below the hydraulic gradient between pipe line connection on the tank and the outlet of the line air will accumulate at the high points. To avoid such pockets of air good pipe line practice demands that all of the pipe be laid in such a manner as to bring all points on the line below the theoretical grade line.

When a tank of oil is run it is usual practice to open the thief hole hatch cover. This is not absolutely necessary with properly equipped tanks for the vacuum valve would admit air fast enough to compensate for the volume of oil withdrawn. But whether the thief hole is opened or air is admitted through the vacuum relief valve the tank will be filled with air as fast as oil is withdrawn.

When the level of the pipe line connection is reached some of this air will escape into the line. As the oil drains out of the line the air will fill it. When the tank is again filled and the oil turned into the line the air in the pipe will be forced ahead of the oil and if any part of the line is above hydraulic gradient level part of this air will be trapped there.

Air is compressible. It therefore occupies a portion of the pipe and reduces the volume of oil that can pass that point. It also tends to increase the rate of flow past the air pocket. This change in velocity will require more energy and when the air pocket has been passed the velocity of flow will again be reduced. This change in energy will effect the rate of discharge of the oil into the lower line.

One way to overcome this change in discharge rate is to place a suction pump at the lower end of the line. By applying a suction to the line between tanks and main line it is possible to change the position of the theoretical hydraulic gradient line so no point in the line will come above this theoretical grade. This assists in moving the oil from the tanks and into the gathering system.

Practically all of the good features described above in pipe line gathering system design have been incorporated into the Shell Pipe Line Co.'s gathering system in the Lucien Pool. Ever since the field was opened and the community block organized for development all field operations have been carefully planned. Much of this work was under the direct supervision of Paul L. Guarin, new division superintendent for this company in the East Texas district, but formerly superintendent of production in the Lucien and adjacent fields. Mr. Guarin's very excellent article on gravity gathering systems was published in The Oil and Gas Journal of August 7, 1930, and a study of the Lucien gathering system shows how closely he has been able to apply good design to this network of pipe lines.

Three 5,000-bbl. capacity gas tight steel tanks near central pump station in Lucien Oil Field, Oklahoma

# Correct Treatment of Oil Field Boiler Water Based on Few Simple Tests

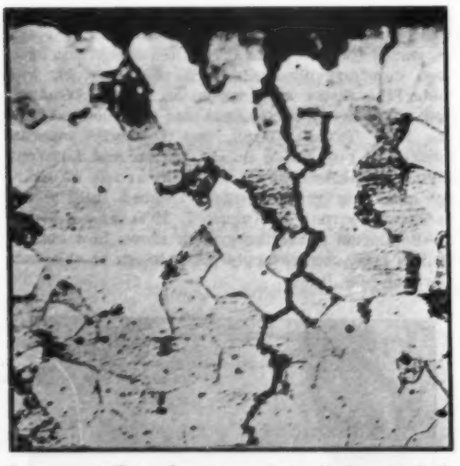
By EUGENE VIGO*

THE MOST POPULAR METHOD of water analysis is that developed by the American Railway Engineering Association, which, because of its simplicity and flexibility, lends itself easily to oil field work and is quickly understood by practical men. Results are expressed as grains of calcium carbonate per gallon and take into account all the constituents in the water that have a direct bearing upon scale formation, corrosion, steam quality and caustic embrittlement of the boiler metal.

The raw water is tested for hardness by adding standard soap solution to a 58.3 c.c. sample until the false and true endpoints are obtained. This gives the amount of calcium and magnesium present. A second sample is taken to which methyl orange indicator is added, and is titrated with N/50 sulphuric acid solution. This in turn gives the total alkalinity of the water which is the division point between the sulphate and bicarbonate hardness and, therefore, with the previous hardness test, the calcium and magnesium bicarbonate and the calcium and magnesium sulphate present can be calculated.

All waters containing not more than three or four grains of incrusting hardness—as determined by the soap test—and giving a methyl orange reading equal to or higher than the incrusting hardness are grouped in the soft water class. These waters will not require any alkaline treatment and do not form scale in the boiler when their silica content is not high. Organic treatment and control of boiler water concentration is about all that is needed in order to offset foaming and priming and, especially, general corrosion in the boilers and in the steam circuit due to the breaking down of the bicarbonates and subsequent liberation of $CO_2$ gas.

External softening of these waters, either by the lime-soda process or by zeolite mineral is not correct. Water of this kind is very common and

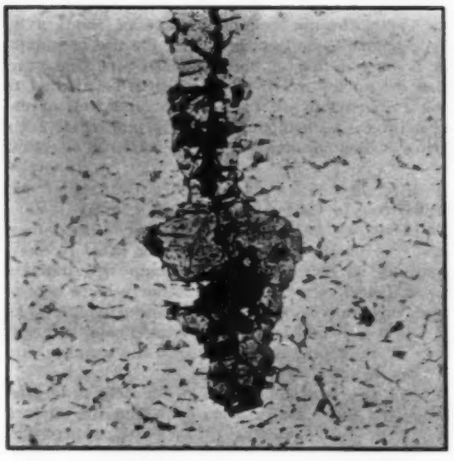


Intercrystalline fracture of steel due to failure to maintain proper embrittlement ratios

found anywhere, even in close proximity to sources giving the hardest water known in that territory.

When the methyl orange reading of the water is equal to or slightly higher than its incrusting hardness, and both readings are higher than 5 or 6 grains per gallon, it is called a bicarbonate water and may be treated internally for coagulation only. In doing this, the precipitate formed in the boiler by the action of the heat is kept in continuous circulation rather than being allowed to form calcium carbonate scale as would be the case otherwise.

*Contribution of National Aluminate Corp. and read before the California Natural Gasoline Association.



Complete destruction of crystal structure of steel took place due to improper treatment

Externally, this water may be treated with lime and sodium aluminate, but no soda ash. Zeolite softening is not called for except when the water shall also be used for some process where calcium is more objectionable than sodium salts. For boiler feed water, high quantities of sodium salts from this treatment are objectionable.

In opposition to the calcium bicarbonate water just mentioned, there is, in a large majority of the cases, water containing both temporary and permanent hardness and it is so recognized by the fact that its soap hardness reading is higher than its total alkalinity as given by the methyl orange titration. The difference of the two readings represents the amount of calcium and/or magnesium sulphate hardness present. Plant conditions and material possibilities should determine the best method of treating this kind of water. External treatment, however, offers a logical method on account of the advantage of eliminating most of the salts that would otherwise produce sludge in the boiler. The higher the amount of sulphate hardness in the water, the better the chances are that the zeolite method will prove the best in the end. Otherwise, the lime and soda and sodium aluminate treatment, hot or cold, is also in line—while I may also add that several of the major oil companies in California are at this time treating internally, with good success, water of this kind as high as 50 grains per gallon of total incrusting hardness. The regulating factor in these cases is the more or less permanency of the boiler installation, feed water heater temperature, and exigency of the plant in general.

The base exchange method or the zeolite treatment of softening water for boiler feed purpose has no substitute under certain conditions. It has the advantage of being as close as possible to a "fool proof" method.

The object of the lime-soda with sodium aluminate treatment is to take out from the water the largest possible amount of solids before it enters the boiler. Theoretically, all calcium and magnesium bicarbonate salts could be eliminated from the water by the lime treatment, leaving the insoluble compound of calcium carbonate and/or magnesium hydroxide to be taken out in the form of sludge. The calcium and magnesium sulphate salts will be reacted upon by the soda ash and converted into calcium carbonate (insoluble) and into sodium sulphate which remains in solution.

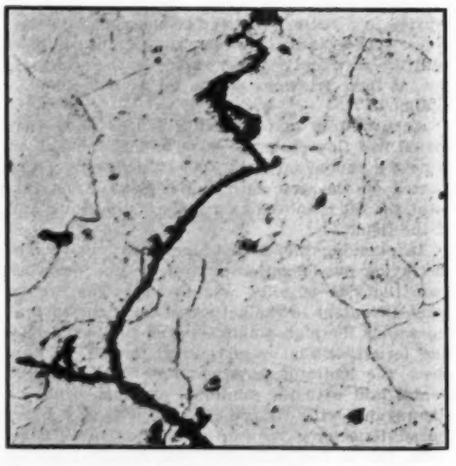
Sodium aluminate has the function of accelerating and completing the above reactions, of reacting with the silica to form sodium-aluminum-silicate sludge, and, when magnesium sulphate is present in the raw water, it converts the resultant and soluble magnesium carbonate into magnesium aluminate which precipitates as a sludge.

The best water produced by this method is one that contains the lowest hardness with the lowest excess alkalinity. The factors used are: .12 pound of lime, and .16 pound of soda ash per 1,000 grains of bicarbonate or sulphate hardness respectively, with the addition of from .15 to .4 pound of sodium aluminate (according to the water temperature) per 1,000 gallons of raw water to be treated.

Proper internal treatment is, and will be considered more on the same basis as external treatment provided it is governed by the same scientific principles and it is used in the right place and—above all—properly controlled.

The bicarbonate hardness of the raw water, which requires lime in external treatment, is broken down here by the heat alone, while the sulphate hardness is reacted upon by the same amount of soda ash as is used externally. Sodium aluminate is added as a coagulant.

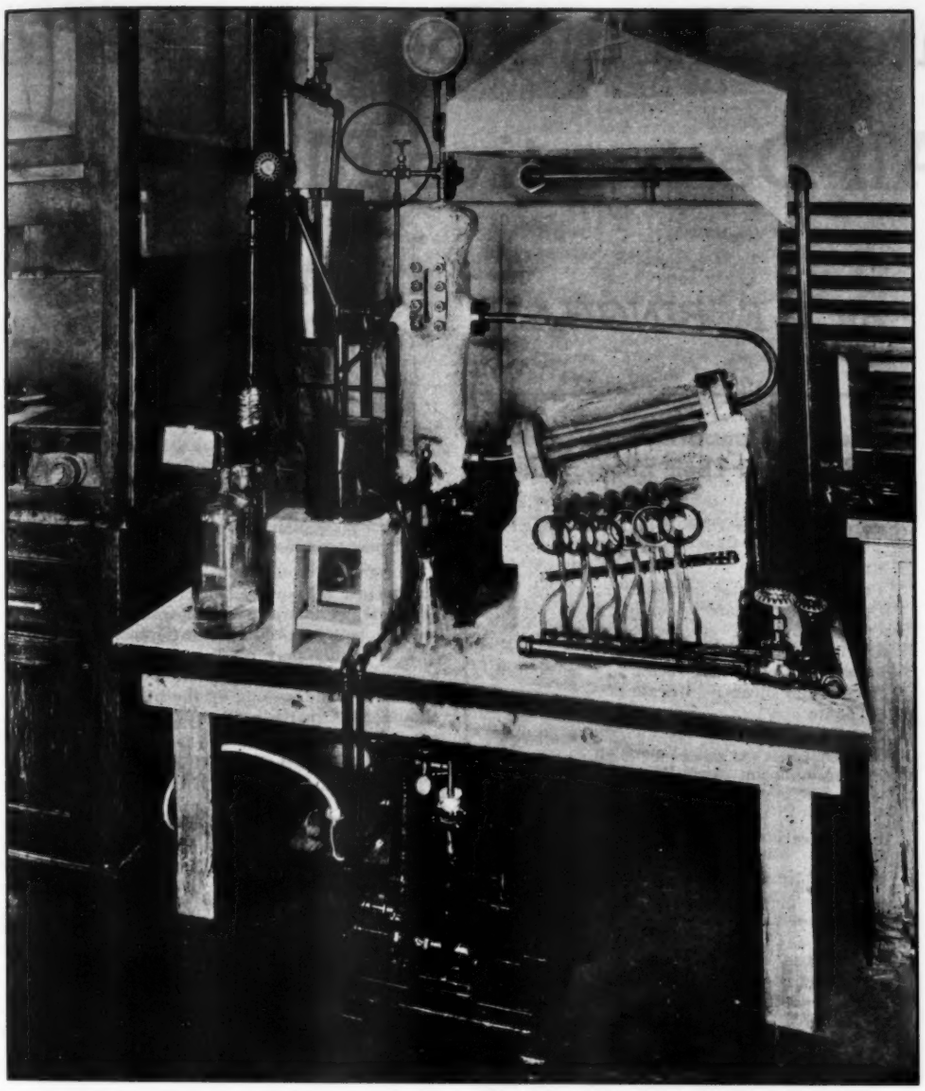
It has already been stated that no permanent results can be obtained in any boiler plant and with any system yet devised, unless proper control of the treatment is maintained at all times. The first requisite for good results in internal treatment is good coagulation of the suspended solids in the boiler water. In the second place, soft water is required which will be coupled with well balanced alkalinity excesses. The alkalinity readings are balanced when the phenol-phthalein alkalinity ("P" reading) is about two-thirds of the total alkalinity ("M" reading) present. This



Transcrystalline fracture of steel due to faulty construction of plate material

will give, by calculation, the same proportion of caustic soda and soda ash excesses at all times.

It is rather hard to estimate the general economy that can be obtained in any plant by the application of a well balanced and effective water treatment. All plant operators have a tendency to shift many of the losses, which are undoubtedly and directly attributable to uncontrolled water, into the "necessary evils" class: equipment maintainance, natural corrosion and deterioration, etc.



Laboratory boiler for studying scale formation. It has a rated capacity of .219 horsepower and may be operated at 800 per cent capacity

while more losses of the same nature are usually included in the operating cost. For instance, if the fuel required to fire an average dirty 100 horsepower boiler is, say 115,000 cubic feet per day, and the fuel required to fire a clean boiler for the same length of time is only 90,000 cubic feet, the difference of about 20 per cent is certainly not calculated as a loss, but is simply absorbed by the operating cost figure. The same goes for the amount of water. If the fireman blows his boilers 10 or even 50 per cent more than necessary because he thinks he has to do so to avoid major trouble, it just means that the plant buys, and treats, and heats 5,000 or 6,000 gallons more water per day than it should have to buy, and treat, and heat if an efficient and well controlled treatment was in use. These losses are ordinarily considered as such only after the economy has started and has ultimately demonstrated them.

In figuring losses and advantages, therefore, the only possible way is to go by approximate percentage based on what the cost is in one way as compared to what the cost proves to be in the other way, according to figures that can be established and proved. I have roughly estimated that to operate a 100 horsepower field boiler, for instance, it costs the average operator about $25 per day. This figure includes fuel, water, boiler cleaning expense, and tube losses. At 100 per cent rating, such a boiler evaporates about 10,000 gallons of water per day. A wash-out and tube-rattling about every 20 days costs not less than four man-hours per cleaning, with the tubes either gradually or all at once renewed every two years on the average. This same boiler, with an efficient treatment, can easily be operated at 125 per cent of its normal rating, thus saving one full boiler day work for every four boilers on the line. Blowdown, in practically all cases can be reduced up to 50 per cent sometimes, and the tube rattling entirely eliminated, while the wash-out period can be extended several months to the time when the regular boiler inspection has to take place. Finally, there is no reason in the world why, with a complete elimination of scale forming salts in the boiler water, the life of the tubes should not be as long as the life of the boiler itself.

A great deal of research has been done lately in trying to minimize or eliminate losses due to incrustation or corrosion of coils in cooling towers, of engine jackets, and other heat exchange equipment, in which water, either from open or closed system, is in circulation.

Treating water externally for such purpose eliminates only part of the troubles encountered, while the application of a slight, but continuous dosage of selected organic matter to the water in circulation, either treated or raw water, has given in majority of cases practically complete results.

Organic matter acts normally as a retarder in precipitation of calcium carbonate crystals due to the action of the heat, and it is also recognized as an inhibitor of corrosion by its property of absorbing oxygen from the water at all temperatures. However, as it is not always possible to prevent the precipitation of such crystals, especially in cases of extremely high temperature, the principal and most effective function of such organic treatment is to change the structure of those crystals—when their precipitation occurs—and prevent their interlacing and baking on in form of scale on the heat exchange surface.

## Bureau of Mines to Conduct Research in West Texas

Plans for future activities of the research laboratory at the Amarillo, Tex., helium plant have been announced by John W. Finch, director of the Bureau of Mines, Department of the Interior. The laboratory staff, which in the past has been concerned largely with work relating to production and conservation of helium, will now direct its efforts toward studies of technical problems involved and utilization of petroleum and natural gas. The Amarillo laboratory is one of the best equipped in the country for research on properties of gases at low temperatures, and additional facilities will be provided for the petroleum studies now being initiated.

The Bureau of Mines has been conducting research studies dealing with oil and natural gas through its petroleum experiment station at Bartlesville, Okla., and field offices at Dallas, Tex., and San Francisco, Calif. These include engineering and chemical studies relating to production, transportation and refining of petroleum, natural gas and their products. Such work is being broadened with initiation of petroleum research at the Amarillo laboratory and the reopening of an experiment station at Laramie, Wyo., which will deal with problems in refining and production in the Rocky Mountain area.

In the bureau's studies relating to oil production emphasis is being laid on the energy associated with petroleum fluids in their natural reservoirs, of producing formations, and the efficient utilization of that energy in obtaining the maximum recovery. The laboratory at Amarillo will take part in that phase of the bureau's research by making studies of physical and thermal properties of petroleum mixtures that have influence on their flow through the producing sands and in wells, using specialized experience and technique developed in the research that has done so much to improve methods and reduce costs of extracting helium from natural gas.

Also the activities of the research group at Amarillo will include special studies of the causes and prevention of freezing in high pressure, natural gas pipe lines, often experienced at temperatures many degrees above the normal freezing point of water. This work will be closely correlated with investigations of flow of natural gas through pipe lines, which have been under way at the Bartlesville station of the bureau.

The laboratory at Amarillo and field studies conducted from it will be especially beneficial to oil operations in the Texas Panhandle, West Texas and New Mexico districts.

The petroleum research activities at Amarillo, as well as the continued operation of the Government-owned helium plant and 50,000 acres of natural gas properties, will be under the general direction of R. A. Cattell, chief engineer of the bureau's petroleum and natural gas division, headquartered in Washington, D. C. C. W. Seibel, supervising engineer of the helium plant, will be in administrative charge at Amarillo, and several petroleum technicians will be added to his staff to aid in the petroleum research centered there.

## Refiners Urge Highway Economy

Refiners in the Mid-Continent territory are urging motorists to familiarize themselves with the problems of highway construction and economies and to insist upon having more miles of paved highways in return for high gasoline taxes and license fees.

The Nation's highways can be extended 5 to 10 times, the oil companies point out, if greater use is made of the asphaltic and bituminous type highway costing an average of $5,000 or less a mile. The "luxury highway" costing $25,000 to $50,000 a mile frequently is a drain on highway department funds and prevents construction of farm-to-market and secondary roads and alternate routes for relief of traffic on the main highways.

# Oil Field Waters Should Be Treated to Eliminate All Destructive Elements

By I. F. BINGHAM

THE COMPANY THAT is able to locate a bountiful supply of oil field water of such quality that it requires no conditioning to make it fit for boiler feed water or other lease uses is indeed fortunate. The greater portion of water used in oil fields requires some type of conditioning in order to avoid heavy losses from deterioration of equipment and from delays. Unfortunately too many operators suffer heavy losses of this nature before they awaken to the necessity of treating the water which they are using. Before choosing between available sources, a complete analysis of a sample from each source should be had. This data, together with a fair knowledge of the effects of the various solids in solution or in suspension, will serve as a guide in choosing the source and planning the installation.

Substances which occur in oil field waters and which render these waters unfit, in varying degrees, for general use are:

1. Solids in suspension.
2. Solids in solution.

Solids in suspension usually consist of mud or silt and waste from sewage systems. Thirty to eighty per cent of these solids may be removed by the simple expedient of settling. Complete subsidence of suspended solids is not possible because colloid suspensoids, theoretically, remain in suspension indefinitely. Where subsidence fails to remove a sufficient fraction of the suspensoids chemical coagulation must be resorted to.

When the coagulent is added to the water the gelatinous floc which first forms is in a minute state of subdivision, but due to the structure and nature of these flocs they enmesh other suspensoids. By this process of growth, relatively large spongy aggregates are ultimately formed which will settle out in the absence of turbulence or which will be strained out in the process of filtration.

Aluminum sulphate, $Al_2(SO_4)_3$, (alum), because of its consistently successful application under varied conditions remains a favorite coagulent. If the water is nearly neutral when aluminum sulphate is added the floc will have a probable composition of $5Al_2O_3 3SO_3$, but when the water is sufficiently alkaline to react pink to phenolphthalein indicator the composition is $Al(OH)_3$.

Other coagulents include ferrous sulphate, lime, sodium aluminate and several others.

Since most coagulate with the exception of sodium aluminate contribute to water hardness, these substances should not be added in greater quantities than actually needed.

Solids in solution constitute the major problem in connection with oil field waters. The ill effects which result in general from solids occurring in solution in water are: (1) Corrosion of metals; (2) deposition of insulating scales; (3) priming and foaming, and (4) caustic embrittlement of steel.

The losses and dangers resulting from boiler corrosion are too well known to warrant discussion. The causes of corrosion are not so well understood, but those causes of common occurrence are: Hydrolysis of magnesium salts produces acids which, although very dilute, are ever present and over an extended time result in heavy losses, and gypsum scale under heat produces a corrosive acid as follows: $CaSO_4 \rightarrow CaO + SO_3$, $SO_3 + H_2O \rightarrow H_2SO_4$; dissolved $CO_2$; galvanic action due to impurities in the steel produce pitting.

The losses from deposition of scale may be summarized as space losses, heating surface losses and consequently boiler capacity losses, fuel losses and heat losses due to insulation.

Reduced boiler efficiencies resulting from insulating scales seem to depend upon the density of the mechanical structure rather than upon chemical composition. For example, 1/50 inch of hard carbonate scale was found to reduce a boiler's efficiency by 9 per cent, while 1/32 inch soft scale reduced the efficiency under similar conditions by 7 per cent.

Foaming and priming seems to be proportional to the solids in the water. The results are poor quality of steam and danger of explosion from false water levels. Caustic embrittlement will be treated later in this paper.

Common impurities found in water and the effect when used for boiler feed water are shown in Table 1. A brief discussion of the salts shown in Table 1 follows:

Silica ($SiO_2$) usually occurs in such limited amounts that it does not require treatment, although such scale as is formed is very hard.

Calcium chloride ($CaCl_2$) is unimportant as a scale forming solid, but contributes to water hardness. It is not of common occurrence in oil field water supplies.

Sodium chloride (NaCl) is often found in raw water. It does not form scale. This salt alone is not corrosive, but in the presence of magnesium salts, particularly magnesium sulphate ($MgSO_4$), forms magnesium chloride, a potentially corrosive substance. Either $MgSO_4$ or $MgCl_2$ will hydrolize when heated to produce corrosive acids.

$$MgSO_4 + H_2O \rightarrow Mg(OH)_2 + H_2SO_4$$
$$MgCl_2 + H_2O \rightarrow Mg(OH)_2 + 2HCl$$

These must be neutralized by an alkaline salt. If caustic soda is the alkaline salt used, the reactions are:

$$MgCl_2 + 2NaOH \rightarrow 2NaCl + Mg(OH)_2$$
$$MgSO_4 + 2NaOH \rightarrow Mg(OH)_2 + Na_2SO_4$$

Magnesium nitrate ($Mg(NO_3)_2$) is a soluble salt which possesses corrosive tendencies.

Oxygen, carbonic acid, and other alkaline substances generally promote corrosion. Corrosive acid gases may be minimized by deaeration before being used in boilers. Adding caustic soda (NaOH) so that alkalinity may be maintained is a corrective measure. The water should be kept as nearly neutral as possible so long as the pH value is on the alkaline side. pH is a term used to indicate hydrogen ion concentration. It is sufficient to remember that a pH value of seven represents a neutral solution, and that alkalinity increases as pH values rise above seven.

The remainder of the salts listed in Table 1 are the carbonates, bicarbonates and sulphates of calcium and magnesium. These salts comprise the chief offenders so far as oil field waters are concerned. The bicarbonates of calcium and magnesium are soluble in water principally because of the presence of carbonic acid. When heat is applied the carbonic acid is removed and the soluble bicarbonate is reduced to a slightly soluble monocarbonate which is precipitated. Water hardness of the above type may be eliminated by heat and hence has been referred to as temporary hardness, although "carbonate hardness" is a more descriptive term. Other types of water hardness depend upon chemical treatment for softening and are referred to as noncarbonate or permanent hardness.

These carbonates, bircarbonates and sulphates of calcium and magnesium respond to the "lime-soda-alum" method of treatment which will be discussed in detail later.

There are various methods of reporting solids in the analysis of a water. A direct chemical analysis may list the scale forming solids according to the following form:

**INCRUSTING (SCALE FORMING) SOLIDS**

| | p.p.m. |
|---|---|
| Silica, iron and aluminum as oxides ($R_2O_3$) | ..... |
| Calcium carbonate | ..... |
| Calcium chloride | ..... |
| Calcium sulphate | ..... |
| Magnesium carbonate | ..... |
| Magnesium chloride | ..... |
| Magnesium sulphate | ..... |
| Sodium carbonate* | ..... |
| Sodium chloride* | ..... |
| Sodium sulphate* | ..... |

*Note: These should not strictly be classed as scale forming solids but contribute to foaming and priming.

Another method known as the ionic form reports the uncombined positive ions separate from the uncombined negative ions, as follows:

**POSITIVE IONS**

| | |
|---|---|
| Calcium | $Ca^{++}$ |
| Magnesium | $Mg^{++}$ |
| Sodium | $Na^{+}$ |
| Iron | $Fe^{++}$ |
| Aluminum | $Al^{+++}$ |

**NEGATIVE IONS**

| | |
|---|---|
| Chlorine | $Cl^{-}$ |
| Sulphate | $SO_4^{--}$ |
| Carbonate | $CO_3^{--}$ |
| Bicarbonate | $HCO_3^{-}$ |
| Hydroxide | $OH^{-}$ |
| Nitrate | $NO_3^{-}$ |

An actual analysis of a sample of water from

### Common Impurities in Boiler Water and Their Effect in Use

| Constituent— | Possible effect— |
|---|---|
| Suspended solids | Priming, foaming, sludge or scale |
| Silica | Scale |
| Calcium carbonate | Scale |
| Calcium bicarbonate | Scale |
| Calcium sulphate | Scale, corrosion |
| Calcium chloride | Scale |
| Magnesium carbonate | Scale |
| Magneisum bicarbonate | Scale |
| Magnesium chloride | Scale, corrosion |
| Free acids | Corrosion |
| Sodium chloride | Inert but may be corrosive under some conditions |
| Sodium carbonate | Priming and foaming, embrittlement |
| Sodium bicarbonate | Priming and foaming, embrittlement |
| Carbonic acid | Corrosion |
| Oxygen | Corrosion |
| Grease and oil | Corrosion, deposits, priming, foaming |
| Organic matter and sewage | Corrosion, deposits, priming, foaming |

**Deeper drilling has called for more steam and suitable boiler feed water is becoming an increasingly aggravating problem. In this, the second of three articles, Professor I. F. Bingham explains the mechanics of boiler scale formation in the field.**

the Canadian River, Oklahoma City Field, is reported below.

**RIVER WATER**

| Ions— | p.p.m. |
|---|---|
| Calcium++ | 73.3 |
| Magnesium++ | 28.5 |
| Sodium+ | 128.0 |
| Chlorides— | 163.0 |
| Sulphates— — | 131.0 |
| Bicarbonates— | 256.0 |
| Carbon dioxides | 6.0 |
| Total | 758.8 |

Total hardness 20 gr./U. S. gal.

It will be noted that the 758.8 p.p.m. shown in the analysis consists largely of the bicarbonates, sulphates and chlorides of calcium and magnesium. Remembering that these are the worst offenders from the standpoint of scale and corrosion promotion, it is very evident that this water should be treated before being used. It is further evident from inspection that most of the offending salts reported in this group respond to the lime-soda-alum method of treatment.

Below is an analysis of water from the same oil field but which is secured at a depth of about 600 feet. This water had a total hardness of about 3 grains per gallon.

**WATER FROM 400-600 FEET**

| Ions— | p.p.m. |
|---|---|
| Sodium and potassium | 36.76 |
| Silica | 0.00 |
| Iron and Al | 0.00 |
| Calcium | 9.65 |
| Magnesium | 6.01 |
| Chlorides | 17.73 |
| Bicarbonates (Na) | 206.00 |
| Sulphates | 14.59 |
| Total | 290.68 |

Calcium and magnesium ions, which are indications of water hardness, are very low in this analysis. This water, it is evident, would not need treatment for prevention of scale, but might require treatment in order to avoid caustic embrittlement.

Solids found in water are reported in the following units:

1. Grains per U. S. gal. (gr./gal.).
2. Parts in million (p.p.m.).
3. Pounds per ten-thousand U. S. gal. (lb./10,000 gals.).

One pound of water weighs 7,000 grains.

One gal. water weighs 8.329+ pounds.

$\therefore$ One gal. of water weighs $9.329 \times 7{,}000 = 58{,}300$ grains.

Therefore, 1 p.p.m. $= \frac{58{,}300}{1{,}000{,}000} = 0.0583$ grains.

To convert from gr./gal. to p.p.m. divide gr./gal. by 0.0583, or multiply by the reciprocal $\frac{1}{0.0583}$ (17.1).

To convert from p.p.m. to gr./gal., multiply p.p.m. by 0.583.

To convert gr./gal. to lb./10,000 U. S. gals., multiply gr./gal. by 1.43.

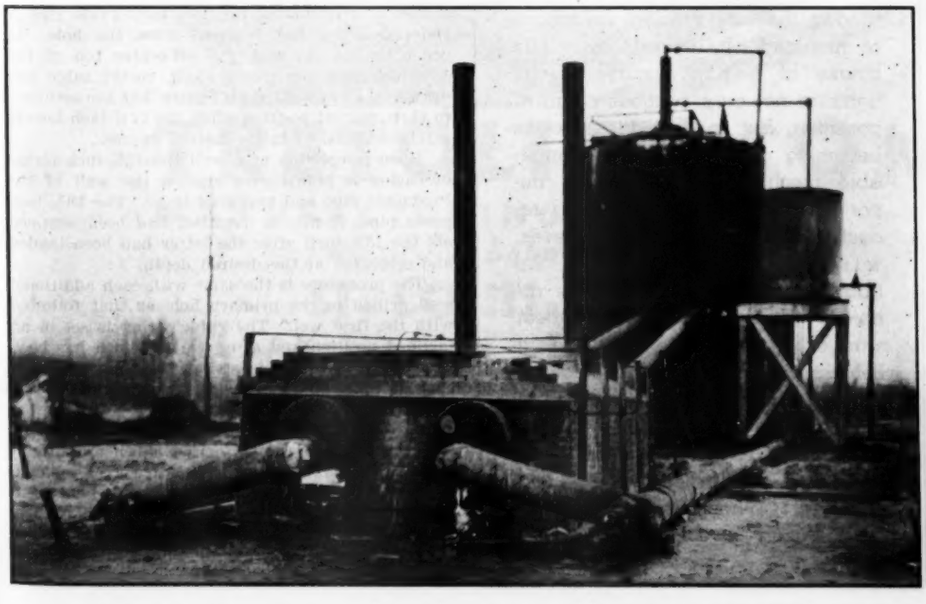
To convert p.p.m. to lb./10,000 U. S. gals., multiply p.p.m. by 0.0834.

There is a distinction between total solids in grains per gallon and total hardness reported in grains per gallon. For example, in the 758.8 parts per million reported in the river water above, the hardness as shown by the soap solution is 20 grains per gallon. If hardness in grains per gallon were equal to total solids, this water would have a hardness of 44 grains/gal. The reason is that not all salts in solution produce water hardness. Sodium salts are really water softeners. We must, therefore, exercise care in making use of the conversion factors set out above.

**Note: This is the second of a series of three articles by I. F. Bingham on the subject of Oil Field Water. The first appeared in the August 1, 1935, issue of The Oil and Gas Journal and the final articles will appear in an early issue.**

# Michigan Producer Uses Dutch Oven for Heating Oil-Water Emulsion

Three of the fields in Michigan have made large quantities of salt water, the Vernon Pool in the Monroe formation, the Porter Pool in the Dundee, and the West Branch Pool in the Traverse. In the Porter Pool about 60 per cent of the wells produce brine along with the oil, and the total brine production is in excess of 15,000 bbls. a day. This is about half as much salt water as the oil being produced, but in some sections of the field the proportion of water to oil is as much as 5 to 1. In some of the wells in the Vernon Pool the percentage of salt water is even greater, according to R. B. Newcombe, noted petroleum geologist. The oil and brine are first run into the 750-bbl. tank which has a circulating connection through the "dutch oven" entering the tank a little over a third of the way from the bottom. The gas is taken off the top of the tanks and used to fire the ovens, while the fluid is forced through salt water in the bottom of the treating tanks which is kept at 135° F. by the circulation from the "dutch oven." Upon separating out the oil flows over into the adjacent storage battery of 500-bbl. tanks and the salt water runs to tanks.



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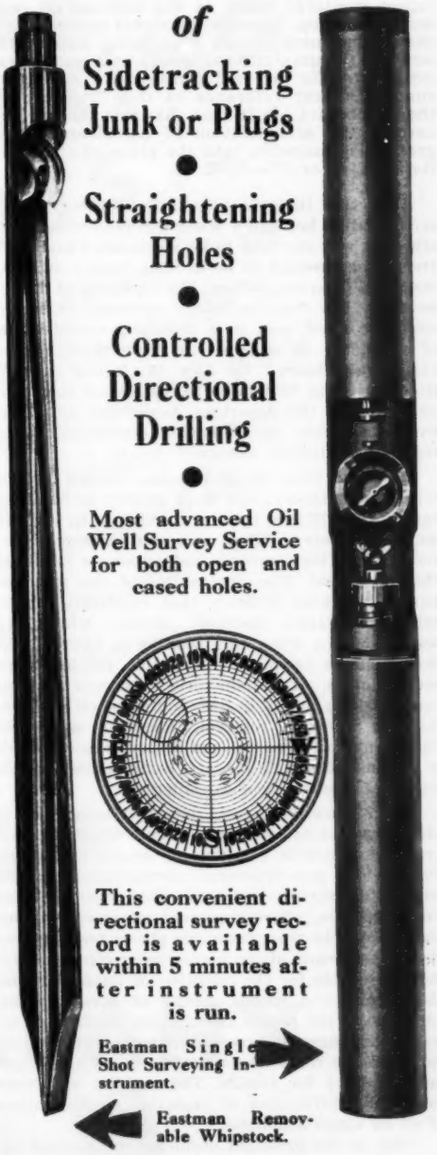



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# PROBLEMS FROM READERS

Edited by T. F. Smiley

## Replacement Theory Now Receiving Consideration of Geologists

**Please explain for me the replacement theory of petroleum underground accumulation. What is referred to as the gravitational theory is the one I supposed was universally accepted by geologists because on the basis of the law of gravitation it places water at the bottom, oil next and gas on top. I read a statement recently that the replacement theory was being substituted now for the gravitational theory by a good many geologists. So far as I can recall I never had run across any reference to this "replacement theory" before. Is it true that this theory concerning the accumulation of petroleum underground is coming to take the place of the gravitational theory?"—T. E. E.**

It is true that the gravitational theory of oil accumulation has had a wider acceptance than any other. It was the first to be propounded and until recent time seemed to be in little danger of being dislodged from its position. The replacement theory, however, has features which commend it to the scientific mind, and it is receiving consideration of geologists. In a paper on "Interpretations of Structural Theory," by Alex W. McCoy and W. Ross Keyte, in "Problems of Petroleum Geology," published by the American Association of Petroleum Geologists, the following discussion of the replacement theory appears:

"The principles of interchange, applied by the replacement theory, will work readily in the laboratory. Oil will pass up, down, or laterally, through water-wet shale to collect in a sand or more porous rock. Earth temperatures and pressures facilitate this movement. The application of the principle harmonizes with evidence that reservoirs in certain stratigraphic positions produce, while they become barren when this position is altered. The theory offers adequate explanation for lens type accumulation. It satisfactorily accounts for occasional irregularity in distribution of oil and water in a producing reservoir. Recurrent structural movement, where source and reservoir are normally not in hydrostatic contact, is favorable for this means of accumulation on structure.

"By application of this theory, structural oil is brought about by earth movements which develop proper hydrostatic relations of source and reservoir, while non-structural accumulations result where this relation is due to sedimentation. Areas over structure, where recurrent movement is consistent, are the most favorable places for dehydration of sediments above source beds; consequently, most favorable for the retention of liquid oil. The theory offers a speedy means of accumulation, available at the proper time, which is afforded by no other suggested process. Excessive heat, pressure and the rapid accumulation of sediments are not necessary for results. The rapidity of action avoids the difficulties of oxidation or dissipation of oil by micro-organisms.

"One of the principal obstacles encountered by the replacement theory is the limitation of such movement. If the writers' analysis is correct, there is no theoretical limitation in time except a break in the continuity of fluids. The movement has been observed in the laboratory only over 23 inches in about two years' time. It has not been demonstrated to be effective over hundreds of feet, which would be necessary before application is beyond question. For the replacement theory to be operative, a rich source of proximity to a water horizon is necessary. Such a source must contain high percentages of organic material, at least in some manner comparable to those of coal deposits. To date, suitable source beds in marine sediments, associated with oil fields, have not been identified. The suspected source beds, as they are now, do not contain such high percentages of organic matter either immediately associated with an oil pool or elsewhere in the basin. The history of source beds is not known and consequently the amount of organic material dissipated by micro-organisms or other agencies is unknown. Although the consistent relation of beds in certain stratigraphic sequence in productive regions is suggestive of possible source, it remains to be demonstrated that such is the case.

"The problem of oil accumulation is not simple. It will doubtless remain unsolved until conclusive proof of many complex contingencies is forthcoming. The origin of petroleum, the identification of source material and many other baffling questions must be answered before the final solution can be developed."

Readers are invited to send questions relating to drilling, producing and transporting operations. These questions will be placed in the hands of persons capable of answering them authoritatively. The names of those writing for information will be considered confidential, initials only being published. This department cannot undertake to answer questions involving patents or intricate formulas or those which properly should be submitted to consulting engineers or geologists.

## WHY THEY CALLED IT *Wheel*

The wheel must be classed among the fundamental inventions of mankind. It altered the whole course of human history, revolutionizing not only methods of transportation, but in its various forms becoming a vital part of innumerable mechanical devices. Its importance lies in the tremendous reduction of friction which it achieves, with resultant diminution of the tractive force required to move an object. The oldest known wheel was found several years ago in Beluchistan, India. Archeologists say it was made about 3000 B.C. It formed part of a two-wheeled cart and is said to be at least 1,000 years older than the earliest wheels used in Egypt. "Wheel" is traced to the Anglo-Saxon "hweol."

## Same Derrick Used in Drilling Two Or More Holes On Ocean Sites

**Please explain for me how more than one well is drilled with just one derrick, as I understand is being done on the ocean front in California. Do they resort to this method because of the difficulty of building derricks out in the open water? I would like to know how they get the holes far enough apart to make them really serve as two wells and also I would like to know how they keep from running into the same difficulty that is encountered sometimes in ordinary fields where a crooked hole has resulted in one operator getting oil from another operator's lease.—E. W. E.**

The principle of multiple drilling on a one-well site is a patented one covering the drilling of two or more wells by utilizing the same surface equipment, casing and primary hole. Before the development of this procedure, twin wells had been drilled under the same derrick in the Long Beach Field and these wells are still being pumped from the same derrick, but the holes in each case were drilled independently of each other instead of employing a primary hole.

The multiple method is especially adapted to tideland development because it reduces drilling costs through elimination of expensive foundations and other surface equipment and because a common rig and a primary hole are utilized by the two or more wells. Rig foundations in marine drilling cost about $35,000, some wells being located 1,500 feet beyond the tide line.

The multiple method, which has been used by the Barnsdall and the Rio Grande oil companies in the Elwood Field, consists first in drilling a primary hole and then two or more additional holes so engineered that they are deviated to the desired point of completion underground.

In the drilling of these wells, it is customary to land a large-size conductor string, usually about 50 feet of 48-inch pipe, to facilitate future drilling. Then an 18⅝-inch temporary guide pipe is set in an inclined position through the larger pipe and driven a few feet below the conductor pipe shoe and then anchored in the cellar.

A 17¼-inch hole then is drilled to the point at which a string of 13⅜-inch casing is to be landed and cemented. After the 13⅜-inch pipe has been landed and cemented, the 18⅝-inch guide pipe is stripped away and removed from the hole. In order to line up with the off-center top of the 18⅝-inch pipe the crown block, rotary table and drawworks are shifted off center, but are returned to their normal position after the 17¼-inch hole is safely established in its desired course.

Upon completion of a well the 12⅜-inch string of casing is pulled over against the wall of the conductor pipe and anchored there. The 18⅝-inch guide pipe, it will be recalled, had been stripped off the 13⅜-inch after the latter had been landed and cemented at the desired depth.

The procedure is the same with each additional well drilled in the primary hole as that followed with the first well. The guide string is set in an inclined position and after the 13⅜-inch has been cemented this again is stripped off and the well carried to completion just as would be the case under normal conditions.

The multiple type of drilling was not designed to permit operators to bottom wells beneath adjoining property and the patentees are said to have established a hard-and-fast rule that whenever a license to use the method is applied for, a careful investigation is to be made before the license is granted to be sure that the object in view is of a thoroughly ethical character.

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## REPRESENTATIVES IN ALL PRINCIPAL FIELDS

# East and East Central Texas

By
L. E. BREDBERG

# CAYUGA TRINITY SAND TEST BEING ANXIOUSLY AWAITED

DALLAS, Tex., Aug. 5.—Operators will be anxiously waiting information on the test of Tide Water Oil Co. and Texas Seaboard Oil Co.'s No. 21-A Wills in the S. Edmondson Survey, Cayuga Field, northwest Anderson County, this week. The Trinity sand test, deepest in East Texas, is waiting on cement to set, but plug will be drilled late in the week. It is considered good for at least a heavy gasser and may prove an oil producer. Seven-inch casing was cemented with 700 sacks of cement last week at 8,750 feet. Total depth is believed somewhere below 8,900 feet.

### Long Lake Outpost

The same companies' No. 1 Shaw and Cern, in the D. Parker Survey, north of production in Long Lake Field, southwest Anderson County, is appearing an oil producer after plugging back from 5,377 feet to 5,345 feet. Casing was perforated from 5,355-60 feet and the well started making 10 bbls. of fluid per hour through five-thirty-seconds inch choke, 75 per cent oil and remainder wash water. The choke was reduced to three-thirty-seconds inch and the well is now making 3 bbls. of oil per hour, with little water. Closed in tubing pressure is 1,200 pounds and closed in casing pressure 2,000 pounds. The well was considered good for only a gasser, being about 1 mile north of the nearest well, a gasser, and an oil producer was somewhat expected.

The same companies' No. 1 Valentine, a wildcat 7 miles north of Palestine in Anderson County, was abandoned at a total depth of 5,222 feet. Elevation is 454 feet. It is in the John Little Survey.

### Rusk Pool—Cherokee County

Shell Petroleum Corp.'s No. 1 New Birmingham Development Co., Levi Jordan Survey, southeast offset to a producer, owned by Wood and others, is to make a second drill stem test at 5,292 feet in sand. It is deeper than northwest offset, but has not logged any salt water sand.

### Camp Hill Pool

The Camp Hill Pool, Anderson County, in which production is obtained from three horizons, sub-Clarksville, Woodbine and Carrizon, is due for its sixth producer. Gulf Production Co.'s No. 3-A Southern Pine Lumber Co., in the J. C. Rosson Survey, an east offset to a sub-Clarksville producer, cored oil sand from 5,090-95 feet and has 3,600 feet of oil in the hole according to an eight-minute test made with a three-eighths inch choke set on the bottom. The sand is sub-Clarksville. Same company's No. 2-A Southern Pine Lumber Co., south offset to a producer, is coring deeper after failing to show any oil on a 10-minute drill stem test from 5,100-22 feet. It showed only 15 joints of mud in that test, made with a three-eighths inch choke on the bottom of the drill stem. It apparently is to miss production from the sub-Clarksville, but may pick up production in the Woodbine as one other well has done.

### Angelina County Well

Lee-Tex Oil Co.'s No. 1 Guissler has been completed at a total depth of 2,054 feet. It made only 11 bbls. per day for seven days through a one-eighth to one-half inch choke, showing badly cut oil. It is in the R. G. Thompson Survey, 5 miles east of Diboll, Angelina County. Elevation is 211 feet.

Yandell Rogers' No. 1 Tidewell, in the Pedro Varela Survey, 3 miles southwest of Mexia, was dry at a total depth of 3,135 feet. Top of the Woodbine was logged at 3,107 feet.

Spear and others' No. 1 Gibson proved a dry hole for Red River County when abandoned at a total depth of 3,625 feet. The Woodbine series was logged at 2,145-65 feet and elevation is 416 feet. It is in the W. L. Gipson Survey, 2 miles east of Bogota.

Tip De'Arman's No. 1 Averett, 4 miles south of Gilmer in Upshur County, was abandoned at a total depth of 3,956 feet. Pecan Gap chalk was logged at 2,585-3,100 feet and Austin chalk from 3,701-54 feet. Elevation is 422 feet. Roger Wolfe and others' No. 1 Dickey, which has been running low on structure, was dry. Total depth is 4,615 feet. Pecan Gap chalk was logged from 2,902-3,107 feet and Austin chalk topped at 4,391 feet. No Woodbine was found. Elevation is 549 feet.

### Wildcat Locations

There were only three wildcat locations staked during the week. Howze Oil Co. is to drill on the C. Finley 85-acre tract in the Bluford Mitchell Survey, 7 miles northeast of Lufkin in Angelina County. Red River County is to have a test in the Benjamin Gooch Survey, one-half mile south of Bagwell, to be drilled by R. H. Chew and others on the J. F. Brooks farm.

Harrison and Abercrombie have location for a second test on the Bowers-Grant farm in the P. D. Midkiff Survey, Red River County, in the same tract where they abandoned a dry hole at 1,120 feet.

Five locations were staked in the Van Field, Van Zandt County, two by Humble Oil & Refining Co., one by Pure Oil Co. and two by independent operators.

### EAST TEXAS FIELD

There were 83 locations staked in the East Texas Field. The Railroad Commission announced "no more exceptions will be granted to Rule 37 until the Supreme Court shall have disposed of the motion for rehearing filed in the case of Brown vs. Humble Oil & Refining Co., wherein the court condemned as invalid all exceptions that cause undue drainage from adjoining tracts or cause waste."

There were 94 tests completed. Six were abandoned, having overstepped the producing bounds, five on the north end, in Upshur County. Seven were completed as pumpers and four were swabbers.

J. K. Wadley's No. 3 Gillespie, William King Survey, on the north edge, Upshur County, was abandoned at a total depth of 3,748 feet. Sand was logged at 3,723-33 feet. Elevation is 390 feet. Two dry holes were abandoned in the William King Survey: Peckham Oil Co.'s No. 6 and No. 10 Hamilton.

### Burke Royalty Purchases

Burke Royalty Co. has purchased three wells and is to drill three more on seven lots in the southeast part of Gladewater townsite from the Texas Pacific Railroad. It purchased the Moore 15-acre lease with three wells in the same lease from Blackwell Oil & Gas Co.

### EAST CENTRAL TEXAS COMPLETIONS

#### Anderson County—Cayuga Field

Burke's No. 1 Morrison, total depth 4,094 feet, initial production 144 bbls. in 24 hours through one-eighth inch choke. Showers & Moncrief's No. 1 Loper, total depth 4,091 feet, initial production 145 bbls. in 24 hours through one-eighth inch choke. Stanolind Oil & Gas Co.'s No. 1 Barton, total depth 4,098 feet, initial production 119 bbls. in 24 hours through one-eighth inch choke; No. 2 Barton, top pay 4,049 feet, total depth 4,095 feet, initial production 128 bbls. in 24 hours through one-eighth inch choke. Tide Water and Texas Seaboard Oil Co.'s No. 1 Loper, total depth 4,074 feet, initial production 71 bbls. in 24 hours through one-eighth inch choke. Tide Water Oil Co.'s No. 1 Valentine, dry and abandoned at 5,222 feet; elevation 454 feet.

#### Limestone County

Y. Rogers' No. 1 Tidewell, dry and abandoned at 3,135 feet, top Woodbine 3,107 feet.

#### Red River County

Spear and others' No. 1 Gibson, dry and abandoned at 3,625 feet, top Woodbine 2,145-65 feet; elevation 416.

#### Upshur County

Tip De'Arman's No. 1 Averett, dry and abandoned 3,956 feet, pecan Gap chalk 2,585-3,100 feet, Austin chalk 3,701-3,754 feet; elevation 422 feet.

#### Angelina County

Lee-Tex Oil Co.'s No. 1 Guissler, total depth 2,054 feet, initial production 11 bbls. per day for seven days one-eighth to one-half inch choke, badly cut oil; elevation 211 feet.

#### Wood County

Roger Wolfe and others' No. 1 Dickey, dry and abandoned at 4,615 feet, Pecan Gap 2,902-3,107 feet, Aus-

Left to right: W. F. Pearson, superintendent of the shop department, Dallas Gas Co.; G. B. Hillyer, assistant purchasing agent, both of Dallas; Eldon Glenn, pipe line foreman, Waco; F. L. Richardson, assistant operations manager, and G. W. Martin, assistant general superintendent, both of Dallas, all with Lone Star Gas Co.

tin chalk 4,391 feet; elevation 549 feet; no Woodbine.

## EAST TEXAS FIELD

### Gregg County

Arkansas Fuel Oil Co.'s No. 11-C Lathrop, top pay 3,570 feet, total depth 3,592 feet, initial production 102 bbls. per hour. Atlantic Oil Producing Co.'s No. 16 Prichard, top pay 3,498 feet, total depth 3,529 feet, initial production 128 bbls. per hour. Empire Gas & Fuel Co.'s No. 25 Lee, top pay 3,540 feet, total depth 3,569 feet, initial production 26 bbls. in 15 minutes; No. 11 Rogers, top pay 3,548 feet, total depth 3,598 feet, initial production 25 bbls. in 15 minutes. Humble Oil & Refining Co.'s No. 22 Harris, top pay 3,522 feet, total depth 3,560 feet, initial production 49 bbls. per hour.

Lee & Burnett's No. 2 Block, top pay 3,598 feet, total depth 3,601 feet, initial production 60 bbls. per hour. Shell Petroleum Corp.'s No. 19 Hampton, top pay 3,653 feet, total depth 3,715 feet, initial production 37 bbls. in 30 minutes. Sinclair Prairie Oil Co.'s No. 22 Williams, top pay 3,508 feet, total depth 3,545 feet, initial production 40 bbls. in 15 minutes. Texas Co.'s No. 18 Lee, top pay 3,553 feet, total depth 3,568 feet, initial production 75 bbls. per hour. Yount Lee Oil Co.'s No. 7 Stephen, top pay 3,540 feet, total depth 3,560 feet, initial production 55 bbls. per hour through eleven-sixteenths inch choke; No. 8 Tuttle, top pay 3,600 feet, total depth 3,620 feet, initial production 55 bbls. per hour through eleven-sixteenths inch choke.

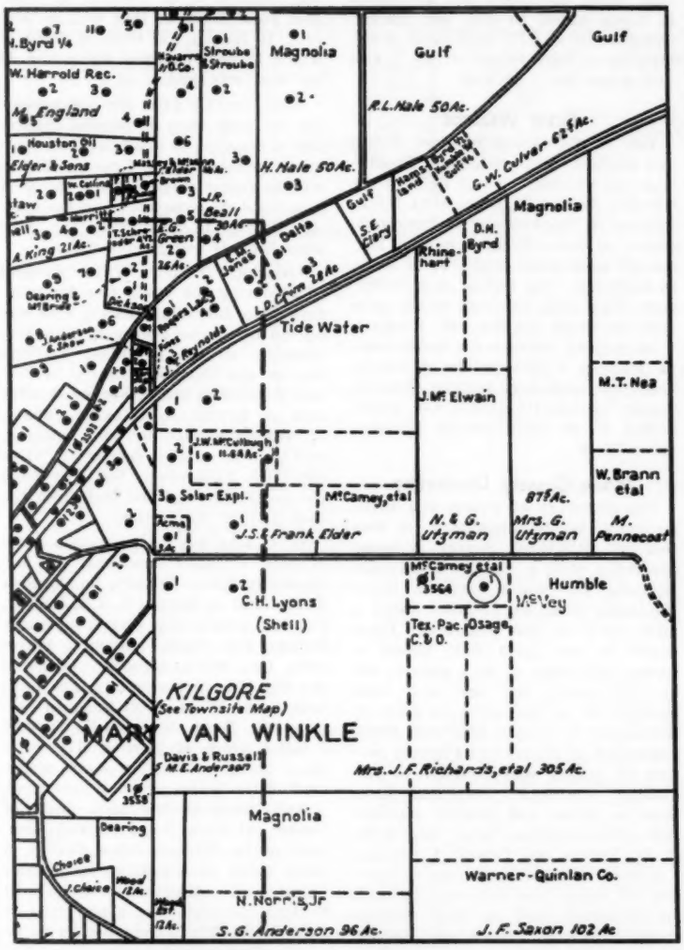
Arkansas Fuel Oil Co.'s No. 12 Brown, top pay 3,572 feet, total depth 3,597 feet, initial production 27 bbls. in 15 minutes. Doss & Jones' No. 6 Martin, top pay 3,746 feet, total depth 3,747 feet, initial production 60 bbls. per hour. Halliburton, Inc.'s No. 8 Lacy, top pay 3,561 feet, total depth 3,573 feet, initial production 85 bbls. per hour. Holte's No. 3 Wells, top pay 3,637 feet, total depth 3,639 feet, initial production 37 bbls. in 30 minutes. Invincible Oil Co.'s No. 19 Weiss, top pay 3,504 feet, total depth 3,518 feet, initial production 130 bbls. per hour.

McMahan's No. 14 Spear-Laird, top pay 3,628 feet, total depth 3,656 feet, initial production 40 bbls. in 30 minutes. Mabee's No. 23 Cole, top pay 3,540 feet, total depth 3,545 feet, initial production 100 bbls. per hour. Moss' No. 3 Walton, top pay 3,526 feet, total depth 3,550 feet, initial production 90 bbls. per hour. National Security Oil Co.'s No. 4 Knowles, top pay 3,515 feet, total depth 3,594 feet, initial production 95 bbls. in six hours. Quad Corp.'s No. 7-A Duncan, top pay 3,667 feet, total depth 3,674 feet, initial production 100 bbls. hour.

Shell Petroleum Corp.'s No. 29 Elder, top pay 3,556 feet, total depth 3,607 feet, initial production 90 bbls. per hour. Southport Refining Co.'s No. 2 Kilgore School, top pay 3,560 feet, total depth 3,614 feet, initial production 71 bbls. per hour. Sowell Bros.' No. 1-B Walker, top pay 3,651 feet, total depth 3,653 feet, initial production 20 bbls. in 15 minutes through 1-inch choke. Sutton & Hawkins' No. 7 Hilburn, top pay 3,698 feet, total depth 3,699 feet, initial production 45 bbls. per hour; No. 5 Hilburn, top pay 3,690 feet, total depth 3,692 feet, initial production 44 bbls. per hour.

### Rusk County

E. C. R. Oil, Inc.'s No. 8 Sherow, top pay 3,565 feet, total depth 3,645 feet, initial production 350 bbls. per day pumping. Hardin's No. 1 Peterson, top pay 3,520 feet, total depth 3,551 feet, initial production 25 bbls. in five hours swabbing. Humble Oil & Refining Co.'s No. 4 Roberson, top pay 3,619 feet, total depth 3,685 feet, initial production 30 bbls. per hour. Natural Petroleum Co.'s No. 1 Henderson, top pay 3,545 feet, total depth 3,585 feet, initial production 15 bbls. per hour. Woodley Petroleum Co.'s No. 8-A Ladd, top pay 3,613 feet, total depth 3,619 feet, initial production 30 bbls. in 15 minutes through three-quarter inch choke.




Showing half-mile eastern extension in Kilgore area, McVey's No. 1 Mrs. S. J. Richards, Gregg County

Day & Co.'s No. 2 McDavid, top pay 3,496 feet, total depth 3,601 feet, initial production 50 bbls. in 24 hours pumping. Arkansas Fuel Co.'s No. 10 Ferguson, top pay 3,631 feet, total depth 3,656 feet, initial production 25 bbls. in 15 minutes. British American Oil Co.'s No. 5 Mayfield, top pay 3,633 feet, total depth 3,646 feet, initial production 95 bbls. per hour. Fair & Thompson's No. 5-A Wiley, top pay 3,570 feet, total depth 3,625 feet, initial production 20 bbls. per hour. Gant and others' No. 4 Simmon, top pay 3,567 feet, total depth 3,606 feet, initial production 17 bbls. per hour pumping.

Humble Oil & Refining Co.'s No. 45 Blackwell, top pay 3,634 feet, total depth 3,659 feet, initial production 64 bbls. per hour; No. 6 Neal, dry and abandoned at 3,700 feet; No. 50-A Silvey, top pay 3,701 feet, total depth 3,773 feet, initial production 60 bbls. per hour; No. 28 Wooley, top pay 3,635 feet, total depth 3,655 feet, initial production 76 bbls. per hour.

Hunt Production Co.'s No. 20-C Fair, top pay 3,616 feet, total depth 3,626 feet, initial production 80 bbls. per hour. Mabee Consolidated, Inc.'s No. 3-A Maxwell, top pay 3,568 feet, total depth 3,625 feet, initial production 15 bbls. per hour pumping. Mallernee and others' No. 7 Alford, top pay 3,603 feet, total depth 3,653 feet, initial production 30 bbls. per hour. Marathon Oil Co.'s No. 77, top pay 3,668 feet, total depth 3,673 feet, initial production 82 bbls. per hour; No. 8 Mills, top pay 3,630 feet, total depth 3,729 feet, initial production 44 bbls. per hour; No. 26 Moore, top pay 3,650 feet, total depth 3,721 feet, initial production 72 bbls. per hour.

Merrick's No. 6 Cooper, top pay 3,540 feet, total depth 3,603 feet, initial production 20 bbls. in two hours, swabbing. Ownby's No. 1-A Wooley, top pay 3,561 feet, total depth 3,650 feet, initial production 20 bbls. per hour swabbing. Retsal Drilling Co.'s No. 10 Maxwell, top pay 3,550 feet, total depth 3,581 feet, initial production 10 bbls. per hour swabbing. Sinclair Prairie Oil Co.'s No. 66 Kinney, top pay 3,641 feet, total depth 3,651 feet, initial production 22 bbls. in 15 minutes. Stanolind Oil & Gas Co.'s No. 20-A Maxwell, top pay 3,765 feet, total depth 3,814 feet, initial production 16 bbls. in 15 minutes; No. 21-A Maxwell, top pay 3,757 feet, total depth 3,816 feet, initial production 10 bbls. in 15 minutes.

Sun Oil Co.'s No. 12 Hendon, top pay 3,560 feet, total depth 3,586 feet, initial production 6 bbls. per hour pumping; No. 11 Lee, top pay 3,628 feet, total depth 3,630 feet, initial production 60 bbls. per hour. Texas Co.'s No. 21 Kersh, top pay 3,613 feet, total depth 3,617 feet, initial production 46 bbls. per hour. Tripp-Mead Oil Co.'s No. 4 Thompson, top pay 3,770 feet, total depth 3,810 feet, initial production 105 bbls. per hour.

### Smith County

British-American Oil Co.'s No. 7 Thompson, top pay 3,628 feet, total depth 3,642 feet, initial production 90 bbls. per hour. Illinois Oil Co.'s No. 38 Mayfield, top pay 3,771 feet, total depth 3,772 feet, initial production 60 bbls. per hour. Florence Oil Co.'s No. 1 Cole, top pay 3,826 feet, total depth 3,827 feet, initial production 100 bbls. per hour. McCutchin's No. 2-B Irion, top pay 3,744 feet, total depth 3,746 feet, initial production 20 bbls. in 20 minutes.

McMurray's No. 6 Roberson, top pay 3,758 feet, total depth 3,759 feet, initial production 40 bbls. per hour; No. 15 Turner, top pay 3,843 feet, total depth 3,845 feet, initial production 60 bbls. per hour; No. 19 Turner, top pay 3,816 feet, total depth 3,817 feet, initial production 40 bbls. in 30 minutes; Pointer Oil Co.'s No. 6 Wright, top pay 3,648 feet, total depth 3,655 feet, initial production 27 bbls. in 45 minutes. Sun Oil Co.'s No. 14-B Pace, top pay 3,776 feet, total depth 3,777 feet, initial production 15 bbls. per hour. Trentman and others' No. 1 Cole, top pay 3,842 feet, total depth 3,843 feet, initial production 130 bbls. per hour.

### Upshur County

East Mountain Production Co.'s No. 4 Shelton, top pay 3,734 feet, total depth 3,738 feet, initial production 30 bbls. per hour. Lewis & Godlin's No. 2-C Mackey, top pay 3,695 feet, total depth 3,710 feet, initial production 20 bbls. in 20 minutes; No. 3-C Mackey, top pay 3,660 feet, total depth 3,669 feet, initial production 20 bbls. in 15 minutes. Humble Oil & Refining Co.'s No. 28 Holland, top pay 3,630 feet, total depth 3,668 feet, initial production 68 bbls. per hour; No. 10 Smith, top pay 3,624 feet, total depth 3,638 feet, initial production 48 bbls. per hour.

Morris' No. 1 Reeves, dry and abandoned at 3,818 feet, elevation 470 feet. Peckham Oil Co.'s No. 6 Hamilton, dry and abandoned 3,756 feet; No. 10 Hamilton, dry and abandoned 3,748 feet. Sabinas Corp. and others' No. 4-B Collins, top pay 3,675 feet, total depth 3,681 feet, initial production 20 bbls. in 15 minutes. Shell Petroleum Corp.'s No. 19 Landers, top pay 3,651 feet, total depth 3,663 feet, initial production 50 bbls. per hour. Sklar Oil Co.'s No. 1-B O'Byrne, dry and abandoned 3,929 feet.

Southland and East & West Oil Co.'s No. 36 O'Byrne, top pay 3,658 feet, total depth 3,660 feet, initial production 60 bbls. per hour; No. 37 O'Byrne, top pay 3,673 feet, total depth 3,701 feet, initial production 20 bbls. in 30 minutes. Starr's No. 1-B Starr, top pay 3,662 feet, total depth 3,665 feet, initial production 20 bbls. in four hours pumping. Sun Oil Co.'s No. 2-B Salter, top pay 3,783 feet, total depth 3,785 feet, initial production 15 bbls. in 15 minutes. Wadley's No. 3 Gillespie, dry and abandoned at 3,748 feet

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In the past two years 37 legislatures have defeated bills calling for increases in gasoline tax rates.

# West and North Texas

By L. E. BREDBERG

# EXTENSION OF COWDEN AREA NORTHWARD AND WESTWARD

FORT WORTH, Tex., Aug. 5.—A 2½-mile extension north of the Cowden area in northern Ector County, a three-quarters mile western extension to the same field, a 1½-mile southern extension to the Goldsmith area in the same county, and the new discovery in northern Jones County making a better well than first expected, were the features in the West Texas district.

Sun Oil Co. and Atlantic Oil Producing Co.'s No. 1 Holt, in Section 5, Block 43, Township 1n, T.&P. Survey, 2½ miles northwest of the Cowden Field, appears an extension of importance to northern Ector and southern Andrews County. It may lead to the proving of continuous production from the Cowden to the Fuhrman or Ford area in Andrews County. The well is about one-half mile south of the Ector-Andrews County line and 12 miles south and a little east of the Fuhrman or Ford Pool with no intervening dry holes.

The test is drilling at 4,120 feet in lime with 2,500 feet in the hole heading every 12 hours. It topped the Yates at 2,780 feet and anhydrite at 1,618 feet. First oil was found at 4,047 feet, increasing upon deeper drilling, this pay proving considerably higher than the main pay in the Cowden area. Deeper drilling will no doubt result in logging greater increases in oil as the main pay of the field is struck.

The Cowden area was also extended three-quarters of a mile west when Landreth Production Co.'s No. 1-A Blakeney, NE cor. Section 28, Block 43, Township 1n, T.&P. Survey, was shot with 200 quarts from 4,120-4,225 feet and flowed 138 bbls. of oil the first three hours after the shot. It also gauged 6,000,000 feet of gas. First oil was logged at 4,170-80 feet with an increase at 4,195-4,205 and from 4,205-20 feet.

Landreth Production Co. also realized a dry hole in the county this week. No. 1-B Blakeney, in Section 22, Block 44, Township 1n, T.&P. Survey, 1½ miles east of Landreth and Humble Oil & Refining Co.'s small discovery in Section 20, and about 5½ miles west of No. 1-A Blakeney, the above mentioned extension, was proven dry at 4,300 feet and was abandoned. Elevation is 3,172 feet.

The Goldsmith area, opened about a month ago by the best well discovered in Ector County, is now proven for at least 3 miles southeast to northwest. Phillips Petroleum Co. and Pure Oil Co.'s No. 2 Cowden, SW¼ of Section 23, Block 44, Township 1s, T.&P. Survey, 3 miles southeast of Gulf Production Co.'s Goldsmith discovery, and 1½ miles due south of Phillips and Pure's No. 1 Cowden, which is proven for a producer, made 167 bbls. in 24 hours through casing on August 4. Total depth is 4,120 feet. Same operators' No. 1 Cowden is being killed to fish out packer. Total depth is 4,171 feet. Gulf is rigging up a west offset to No. 1 and will offset No. 2 at once.

### Ector Wildcat

Roy A. Westbrook of Fort Worth has made a deal with Gulf Production Co. whereby he will drill in the NW cor. Section 26, Block B-14, P.S.L. Survey, in the extreme southwestern corner of Ector County, on the Yarbrough and Allen lands. It is to go to 4,000 feet. The test is on a 20,000-acre block held by Gulf which gave half the block for the test. Location is on a trend between the Tubbs area in western Crane to the Keystone area just opened in eastern Winkler County by Gulf Production Co., which makes it an exceptionally interesting wildcat.

### Jones County Discovery

The discovery of Farris and Fikes on the J. W. Jennings farm, in Section 207, B.B.B.&C. Survey, is being connected with a line by Panhandle Refining Co. which owns a small skimming plant at Leuders about 3 miles east of the discovery. Total depth is now 2,041 feet, where it flowed 875 bbls. of 40.1 gravity oil in 21½ hours, the best well ever brought in in the northern part of the county. It is on a 2,000-acre block assembled by Farris and Fikes, a portion of which was donated to the drilling contractor. Locations have been on offset and nearby acreage, two offset locations being staked by R. B. Farris and Leland Fikes, co-discoverers. Humphrey and Guiberson Oil Corp. are expected to drill an immediate test on their 80-acre tract in the same section, and Ungren and Frazier, drillers of the test, are also expected to drill an immediate test on their quarter section to the north. The well has been given a daily allowable of 325 bbls. The producing horizon is the King sand.

### Keystone Area—Winkler County

The Keystone area, Winkler County, has another well, its fifth, in the making with three others making large volumes of gas and also having plenty of prospects of proving producers. Gulf Production Co.'s No. 6 Keystone Cattle Co., Section 16, Block B-2, a little over one-half mile from the company's second well, is drilling at 3,575 feet with 500 feet of oil in the hole. No. 3 Keystone, Section 11, 1 mile south of the company's discovery well, drilled plug at 3,363 feet, cleaned itself, and is making 5,000,000 feet of gas, appearing a sure producer. No. 1 Keystone was drilled to 3,520 feet and flowed 277 bbls. of oil and 21 bbls. of water during the 24 hours ending August 5. Deepening increased the production slightly as was the case in Richardson's No. 1 Walton, northwest in Section 1, Block B-3. Total depth of that well is 3,602 feet. It flowed 130 bbls. of fluid of which 18 per cent was water and 48 per cent was mud.

Wells in this area are not appearing as large ones at present regardless of shooting or acidizing, but operators believe better lime conditions will be found deeper. After the first nine tests are completed and the acreage proven to production the company intends using cable tools.

Locations in West Texas jumped to 26 during the week, five for wildcats, two for semiwildcats and one an old test to be deepened. This was formerly drilled by Liner Drilling Co. on the Campbell ranch, in Section 2, Block 5, P.S.L. Survey, 3 miles east of Kermit in Winkler County. It was abandoned by that company and is to be carried deeper by Wilgo Oil Corp. Location is 900 feet from the north line and 300 feet from the east line of the section.

W. C. Ray has made location for a wildcat 5 miles southeast of McCamey in Upton County, on Cordova Union land in Section 3, A.B. Survey. Another wildcat was staked in Scurry County this week. Magnolia Petroleum Co., which recently completed one dry hole in the county, has location on the W. M. Scott lands in Section 186, Block 3, H.&G.N. Survey, 5 miles south of Snyder. The company holds a block of 5,000 acres, most of the leases expiring next year.

Announcement has been made of Dobbs Oil Co.'s No. 2 Friend, location in the William Allen Survey, 5 miles south of Big Lake in Reagan County. The discovery well is still waiting installation of a new type of flow valve. The second test is to be south of the discovery.

Harris and others are to drill a wildcat on lands owned by the Georgia Institute of Technology in Section 89, Block 24, T.&P. Survey, Nolan County. This will be the first test in this county in a long time. Merry Brothers and Perini and Tide Water Oil Co. brought in a discovery well northeast of Rotan in Fisher County a couple of months ago. These same operators have abandoned their second try in the Rotan area, No. 1 Hittson, Section 177, Block 2, H.&T.C. Survey, east of the discovery well, at a total depth of 3,711 feet. Elevation is 1,871 feet.

### Howard County

W. E. Production Co. defined the northwestern edge of the Iatan Field in eastern Howard County this week when No. 1 Read, Section 46, Block 30, Township 1n, T.&P. Survey, was abandoned at 2,842 feet. Elevation is 2,320 feet. It was given a 500-quart shot but failed.

The northwestern edge of the Taylor-Link Pool, Pecos County, was also defined this week. Shell Petroleum Corp.'s No. 2-F University, Section 32, Block 16, was given up at 1,657 feet. It is about 1,300 feet northeast of production.

### Ordovician Test

Another hole has been drilled below 10,000 feet in West Texas. Loffland Brothers, John I. Moore and others have sunk No. 1 L. S. McDowell, Section 22, Block 34, Township 2s, T.&P. Survey, Glasscock County, to 10,115 feet and treated it with 6,000 gallons of acid. The hole is being swabbed and tested. This is the second test to be drilled below 10,000 feet in the district, the other being Gulf Production Co.'s No. 103 McElroy in western Upton County, which went to 12,786 feet before plugging back to make a producer from a higher formation. Both have been drilled into the Ellenburger lime, the producing formation of the Ordovician. The McDowell test has been making flows when tools were brought out of the hole, and another oil showing was reported to have been logged at 10,024 feet.

### Andrews County

The half mile southwest extension and second well in the Parker area 5 miles southeast of the Deep Rock Pool, Andrews County, was but a small well. Honolulu Oil Co. and Llano Oil Co.'s No. 1-B J. E. Parker, Section 11, Block A-42, made an initial production of only 165 bbls. per day pumping, after being treated with acid twice. Total depth is 4,804 feet. This is the second well for this outpost area and its size leaves no incentive for drilling.

### Pecos County Wildcat

A 2,500-foot test is to be drilled by Shamrock Oil & Gas Co., Section 12, Block 125, T.&St.L. Survey, Pecos County, in an area where Phillips Petroleum Co. drilled two dry holes, one in Section 8 and the other in Section 9. Location is on the J. L. Nutt ranch.

## WICHITA FALLS AND RANGER

Samuel S. Alexander and others are to drill a wildcat on the Whitney and others lands in the NW ¼ of Section 4, H.&T.B. Survey in the extreme northwest corner of Stephens County near the Throckmorton County line. It was spudded August 2 and will first be drilled around 2,150 feet in quest of production in the Moran sand. It it misses it will be deepened to the Ibex sand, around 3,400 feet, thence to the Breckenridge lime at the 3,900-foot level, and to the Ellenburger lime. Location is about 1½ miles east of the Loggie gas field in Section 8, H.T.&B. Survey, and about 15 miles north of Pitzer and West's No. 1 De LaFosse test, which appeared as a producer from the Ellenburger, but is now in bad condition

following a premature explosion of a shot in the pipe. Derrick may have to be skidded.

Dr. Yates Devore, first to map the Breckenridge Field, worked the geology for this new test. Mr. Alexander is an independent operator of New York who has production in North and West Texas.

Dan Holmes, of Wichita Falls, and Luther Webb of Vernon are to drill a 4,000-foot test at the intersections of Sections 48, 59, 61 and 65 in Block 15, H.&T.C. Survey, Wilbarger County, on a 1,500-acre block 20 miles north of the South Vernon Pool on the Waggoner ranch and 18 miles south of Altus, Okla.

L. T. Burns' No. 1 Weinzapfel & Son, discovery in Lot 99, Clark and Plumb Subdivision, Block 4, Archer County, has started an active leasing campaign in the area and an offset is being drilled by the discoverer. The discovery well, west of Windthorst, struck the Canyon at 1,906 feet, drilling to 1,941 feet and shutting down. It is 9 miles southeast of the deep producers in the Chalk Hill Pool, and logged the sand higher.

E. A. Regal is drilling a 2,000-foot test on a 1,350-acre block 7 miles west of Gainesville on the trend running north of Muenster in Cooke County. The block centers in the A. Van Slyke Abstract A-1,076, and the Thomas Walker Survey. A former test drilled east of this block by J. K. Wells of Oklahoma City, had several good showings of oil, which furnished the incentive for this second test.

### Grayson County Activity

Olson Drilling Co. of Oklahoma has contract to drill a 6,000-foot test for Gardner Petroleum Co., Skelly Oil Co., Brownwood Oil Co., all of Tulsa, and Charles Olson of Boston, Mass., on a 22,000-acre block 7 miles northwest of Denison on the Preston arch, Grayson County. The test will drill through the Simpson series, expected between 3,000 and 3,500 feet, to the Arbuckle lime, and will be spudded by September 1. Over 10,000 acres was leased in the county during the week, in an area between the Red River and the M.K.&T. Railroad from Denison to 3 miles west of Pottsboro. Operators are now leasing north along the river to the old Harris and Haun 3,500-foot dry hole.

Production in the Wichita Falls district during the week averaged 60,345 bbls. per day, a drop of around 3,000 bbls. per day.

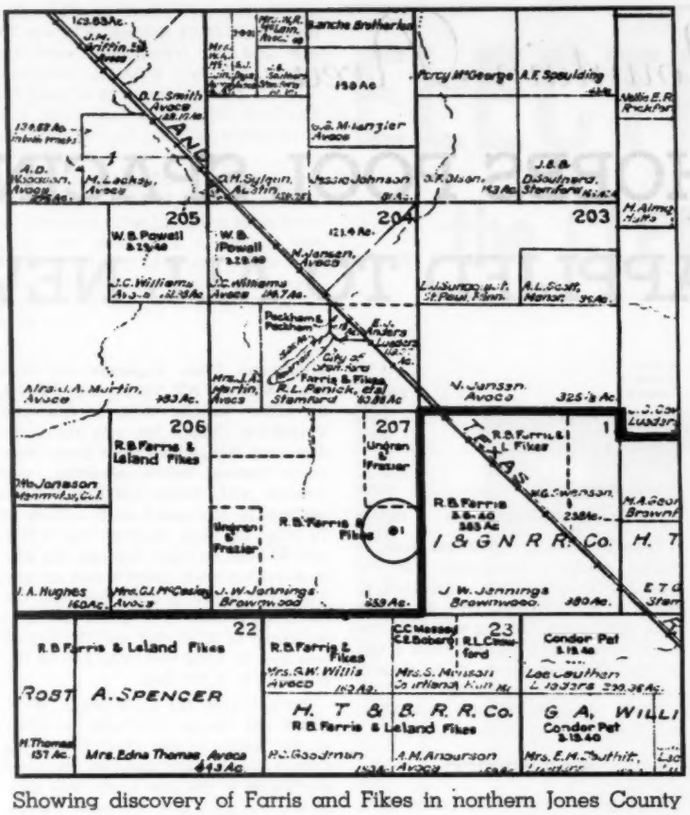
## PANHANDLE COMPLETIONS

### Gray County

Kewanee Oil & Gas Co.'s No. 6 Morgan, top pay 3,227 feet, total depth 3,295 feet, initial production 158 bbls., pumping; No. 13 Smith Rest, top pay 3,200 feet, total depth 3,293 feet, shot with 440 quarts from 3,192-3,293 feet, initial production 298 bbls. per day, pumping. Mordyan Oil Co.'s No. 5 Davis, top pay 2,716 feet, total depth 2,805 feet, initial production 784 bbls. per day, on gas lift. Nabob Oil Co.'s No. 4-A Morse, dry and abandoned at 2,865 feet. Phillips Petroleum Co.'s No. 2 Worl, top pay 3,115 feet, total depth 3,160 feet, initial production 120 bbls. per day, pumping.

### Wheeler County

C. & H. Drilling Co.'s No. 1 Binkley, total depth 2,446 feet, shot with 40 quarts from 1,920-80 feet, initial production 12,600,000 feet of gas. Helena Oil & Gas Co.'s No. 6 Keller, top pay 2,430 feet, total depth 2,457 feet, initial production 1,891 bbls.; No. 8 Keller, top pay 2,435 feet, total depth 2,462 feet, initial production 2,186 bbls. Phillips Petroleum Co.'s No. 1 Binkley, total depth 2,557 feet, plugged back to 2,295 feet, initial production 16,060,000 feet of gas. Skelly Oil Co.'s No. 5 Johnson, top pay 2,352 feet, total depth 2,487 feet, initial production 792 bbls. Texas Co.'s No. 4 Bush, top pay 2,401 feet, total depth 2,510 feet, initial production 379 bbls.; No. 12 Keller, top pay 2,353 feet, total depth 2,532 feet, initial production 1,339 bbls.




Showing discovery of Farris and Fikes in northern Jones County

### Hutchinson County

International Petroleum Co.'s No. 11 Lewis-Badger, top pay 2,930 feet, total depth 2,965 feet, initial production 120 bbls. per day, pumping.

## WEST CENTRAL TEXAS COMPLETIONS

### Brown County

Evans' No. 2 Garms, dry and abandoned 943 feet. Jones and others' No. 1 Locker, temporarily abandoned 945 feet.

### Callihan County

Hensonit and others' No. 1 Cutbirth, dry and abandoned 733 feet. Humble Oil & Refining Co.'s No. 1 Williams, total depth 950 feet, initial production 18 bbls. Shuman Syndicate's No. 1 Jackson, total depth 944 feet, initial production 101 feet. Ungren & Frazier's No. 5-B Jackson, total depth 1,215 feet, plugged back to 922 feet, initial production 10 bbls.

### Eastland County

Earle's No. 1 Blank, dry and abandoned 3,081 feet. Moore's No. 3 Carter, top pay 1,572 feet, total depth 1,592 feet, initial production 60 bbls. day, pumping. Cohen's No. 6 Turner, total depth 1,296 feet, initial production 25 bbls. Hickok Producing & Development Co.'s No. 1 Bardwell, total depth 3,891 feet, initial production 15 bbls. Lone Star Gas Co.'s No. 1 Blank, dry and abandoned 3,812 feet.

### Coleman County

Boysen and Whiteside's No. 1 Holt, dry and abandoned 1,369 feet. Eppenauer Drilling Co.'s No. 3 Shields, total depth 1,890 feet, initial production 126 bbls.

### Shackelford County

Albany Oil Co. and others' No. 3 Davis, top pay 1,571 feet, total depth 1,591 feet, initial production 75 bbls. day, pumping. Banner and others' No. 1 Nail, dry and abandoned 1,538 feet. Callihan's No. 1 Davis, total depth 1,640 feet, initial production 22 bbls. Choate and McCamey's No. 1 Simpson and others, total depth 1,550 feet, initial production 20 bbls., pumping. Douglas' No. 1 Baker, dry and abandoned 716 feet. Fortex Oil Corp.'s No. 1 Newell, dry and abandoned 1,448 feet. Hoffman and Page's No. 5 Morris and Buie, total depth 1,596 feet, initial production 186 bbls. Iron Mountain Oil Co.'s No. 1 Cottle, dry and abandoned 2,080 feet. Kleiner and others' No. 1 Baker, total depth 1,668 feet, initial production 10 bbls. Reclamation Oil Co.'s No. 1 Davis, dry and abandoned 1,840 feet. Reliance Oil & Royalty Co.'s No. 7 Davis, total depth 1,641 feet, initial production 20 bbls.; No. 1 Sanders, dry and abandoned 517 feet. Roeser and Pendleton's No. 57-A-61 Morris and Buie, total depth 1,277 feet, initial production 50 bbls. Roeser and Pendleton and Humble Oil & Refining Co.'s No. 24-201 Morris and Buie, dry and abandoned 1,660 feet. St. Mary's Oil & Gas Co.'s No. 6 Davis, total depth 1,644 feet, initial production 15 bbls. Tannehill and others' No. 23 Matthews, dry and abandoned 1,250 feet. Texas-Centennial Oil Co.'s No. 3 Earhart, total depth 770 feet, initial production 20 bbls. Worth Petroleum Co.'s No. 1-A Clark, dry and abandoned 767 feet.

## WEST TEXAS COMPLETIONS

### Andrews County

Honolulu and Llan Oil Co.'s No. 1-B J. E. Parker, top gray lime 4,294 feet, total depth 4,804 feet, acidized twice, initial production 165 bbls. per day, pumping.

### Brewster County

Smith's No. 1 Decies, dry and abandoned at 1,310 feet, elevation 4,271 feet.

### Ector County

Landreth Production Co.'s No. 1-B Blakeney, dry and abandoned at 4,300 feet, elevation 3,172 feet.

### Fisher County

Tide Water Oil Co. and others' No. 1 Hittson, dry and abandoned at 3,711 feet, elevation 1,871 feet.

### Howard County

Murray and others' No. 3 David heirs, total depth 2,835 feet, initial production 244 bbls. per day, pumping. Sinclair Prairie Oil Co.'s No. 16 Dodge, total depth 2,777 feet, shot with 350 quarts from 2,550-2,777 feet, initial production 372 bbls., swabbing. Merrick and Lamb's No. 2 Bell, total depth 2,834 feet, shot with 375 quarts from 2,653-2,830 feet, and with 40 quarts from 2,451-61 feet, initial production 35 bbls. per day, swabbing. International Petroleum Co.'s No. 3 Kloh, total depth 2,905 feet, shot with 280 quarts from 2,580-2,650 feet, initial production 298 bbls. per day, pumping. W. E. Production Co.'s No. 1 Read, dry and abandoned at 2,842 feet, elevation 2,320 feet, shot with 500 quarts.

### Pecos County

Adams and others' No. 2 Masterson, total depth 1,420 feet, initial production 80 bbls. in 23 hours. Shell Petroleum Corp.'s No. 2-F University, dry and abandoned at 1,657 feet. Marathon Oil Co.'s No. 39-A Yates, total depth 1,255 feet, initial production 26 bbls. per hour. Phillips Petroleum Co.'s No. 4 Monroe, total depth 1,360 feet, initial production 514 bbls. daily.

### Upton County

Bradford's No. 1 California-Allen, abandoned at 818 feet. California Co.'s No. 34 Durgin, total depth 2,563 feet, shot with 130 quarts from 2,433-2,563 feet, and with 200 quarts from 2,295-2,433 feet, initial production 1,926 bbls. per day; No. 19 York, total depth 2,520 feet, shot with 330 quarts from 2,278-2,514 feet, initial production 904 bbls. per day. Lindsay and Bolin's No. 1 Wallis, total depth 2,628 feet, shot with 300 quarts from 2,407-2,628 feet, initial production 240 bbls. per day. Humble Oil & Refining Co.'s No. 4 Richter, total depth 2,563 feet, shot with 300 quarts from 2,346-2,563 feet, initial production 39 bbls. of oil and 1 bbl. of water per day. Gulf Production Co.'s No. 59 O'Brien, total depth 2,789 feet, shot with 200 quarts from 2,789-2,651 feet, initial production 374 bbls. per day.

### Winkler County

Mid-Continent Petroleum Corp.'s No. 2 Howe, total depth 3,020 feet, initial production 240 bbls. per day.

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G. W. Chapman, formerly in the crude oil department of the Sun Oil Company, Dallas, Tex., has been transferred to the scouting department and moved to Palestine, Tex.

# Rocky Mountain Area

# HOBBS POOL SPACING RULE IS APPLIED TO ALL NEW MEXICO

By
T. R. INGRAM

DENVER, Colo., Aug. 5.—The New Mexico Conservation Commission has put into effect temporarily in all proven fields spacing rules requiring one well to 40 acres. The State of New Mexico has taken action in the Supreme Court to collect property taxes on oil field equipment and supplies. Three completions in the Monument area resulted in some extensions to the pool, the Texas Co.'s No. 1 Saunders, 3 miles north of production, making 53 bbls. an hour after acidizing. The Atlantic Oil Producing Co. has a small well in the Eunice Pool in its No. 1-G State. The Amos G. Carter wildcat, 6 miles east of the Cooper Pool, was completed for 43 bbls. a day after a shot. Three completions in the Jal area included R. H. Henderson's No. 1 Langlie, 2 miles east of production, which gauged 70 bbls. in 24 hours. Shell Petroleum Corp.'s No. 4 Berry, flank well in the Hobbs Pool, swabbed 97 per cent water after acidizing. Argo Oil Co.'s No. 2 Burner, in the Lea area, was abandoned. Eddy County had one small completion. There were three new operations reported, one in the Eunice Pool and two in the Cooper Pool.

Production estimates for week ended August 3, 1935:

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|---|---|
| **WYOMING** | |
| Salt Creek | 16,730 |
| Big Muddy | 1,570 |
| Badger Basin | 30 |
| Black Mountain | 290 |
| Byron | 1,070 |
| Dallas Derby | 530 |
| Dutton Creek | 80 |
| Elk Basin | 650 |
| Ferris | 20 |
| Frannie | 800 |
| Garland | 820 |
| Grass Creek | 5,820 |
| Greybull | 10 |
| Hamilton Dome | 710 |
| Hudson | 240 |
| LaBarge | 1,380 |
| Lance Creek | 1,720 |
| Lost Soldier | 1,050 |
| Mule Creek | Shut in |
| Midway | 80 |
| Notches | Shut in |
| Oregon Basin | 3,210 |
| Osage | 820 |
| Pilot Butte | 30 |
| Rex Lake | Shut in |
| Rock River | 1,570 |
| South Casper | 550 |
| Poison Spider | 250 |
| Teapot | 20 |
| Waugh Dome | 210 |
| Total Wyoming | 40,250 |
| **MONTANA** | |
| Buckley-Border | 240 |
| Cat Creek | 870 |
| Cut Bank | 5,200 |
| Dry Creek | 330 |
| Kevin-Sunburst | 3,400 |
| Lake Basin | 50 |
| Pondera | 1,370 |
| Total Montana | 11,460 |
| **COLORADO** | |
| Florence | 130 |
| Fort Collins and Wellington | 410 |
| Ilex Dome | 2,740 |
| Moffat | 440 |
| Orchard | 70 |
| Rangely | 80 |
| Tow Creek | 170 |
| Total Colorado | 4,040 |
| **NEW MEXICO** | |
| Artesia | 440 |
| Cooper area | 6,170 |
| Eunice area | 6,000 |
| Hobbs | 31,330 |
| Hogback | 150 |
| Hospah | Shut in |
| Jal | 4,340 |
| Lea area | 1,340 |
| Maljamar | 1,470 |
| Rattlesnake | 720 |
| Table Mesa | 90 |
| Total New Mexico | 52,480 |
| Total Rocky Mountain region | 108,230 |

Location for a 7,000-foot test in Fallon County, Montana, was released. Six wells were completed in the Cut Bank Field, two of which were dry, one a flowing well and one a gas well. Texas Co. will drill a test in the south extension. Toole County had one small completion.

Utah reported a new operation ready to spud in Grand County.

## NEW MEXICO

The New Mexico Conservation Commission has entered an order temporarily extending the rule now in effect in the Hobbs Pool for the spacing of wells to all producing fields in the state. It is effective August 12. Hobbs operators at the time proration began adopted a rule providing for one well to 40 acres, these generally being in the center of the unit. Similar spacing is mostly in effect in the other Lea County pools. The rule will be in effect until the commission has conducted hearings and adopts a permanent spacing program for proven fields. Eddy County operators, in districts where production is found in sand, have voiced disapproval of the rule on the ground one well to 40 acres will not recover all oil obtainable in sand wells.

The commission's rule for wildcat wells, wells located not less than 2 miles from a commercial or potentially commercial well and outside of any proven field, provides for spacing not less than 330 feet from lease or property line and 660 feet from any other well. Exceptions may be made by the commission where there is not waste apparent, or where surface conditions made the rule impracticable or a separately owned tract is not large enough for compliance.

Litigation pending for some time in the courts as to the legal right of the state tax commission to levy a property tax on oil field equipment took another turn the past week when the state, through the attorney general, filed a petition directly in the Supreme Court at Santa Fe for a writ of mandamus to compel the state tax commission to take steps to place large quantities of improvements, equipment, materials and supplies on the tax rolls in Lea and Eddy Counties. The state seeks to have the tax commission require operators to fill out forms necessary to put the property on the tax rolls for the years 1930 to 1935.

### Monument Area

Two wells were completed in the Monument Pool. Superior Oil Co.'s No. 1 State, C NE NE Section 2-20-36, an offset on the west to Amerada Petroleum Corp.'s No. 1-D State, the discovery well, which went dead twice while testing before acidizing, was treated with 2,000, 4,000 and 6,000 gallons. It responded with a flow of 70 bbls. an hour through the 7-inch and 50 bbls. an hour through the 2½-inch tubing with 500,000 feet of gas. The total depth is 3,945 feet and the elevation is 3,596 feet. The 7-inch was cemented at 3,791 feet and the tubing was run to 3,900 feet. The top of the pay was at 3,800 feet.

Twin States Oil Co.'s No. 1 Weir, C NE SE Section 35-19-36, an offset on the north to the Shell Petroleum Corp.'s No. 1 State and two locations northwest of the discovery, was completed at 3,935 feet. It made only a few gallons of oil before acidizing. After treating with 4,000 gallons it flowed 73 bbls. the first hour, 68 bbls. the next hour, 46 the next and in the seventh hour had dropped to 40 bbls. where it held to around that figure. The test was through the 2½-inch tubing at 3,935 feet with 950 pounds back pressure. Elevation is 3,601 feet.

The Texas Co.'s No. 1 Saunders, C SE SW Section 18-19-37, 3½ miles north of the discovery, is practically a completion at 3,953 feet, total depth. After acidizing with 2,000 gallons and after swabbing in it flowed at the rate of 53 bbls. an hour through the 2½-inch tubing at 3,940 feet with 1,000,000 feet of gas and 4 per cent basic sediment and water. The gas-oil ratio was 776/1. After flowing eight hours it fell off to 23 bbls. per hour and was shut in for pipe line connections. The elevation is 3,693 feet. Outside of the Shell's No. 1-E State, which was estimated at 12,000 bbls., none of the completions since the discovery came in have indicated the presence of a major pool comparable with Hobbs which at that time was thought possible.

Amerada Pet. Corp.'s No. 1 Andrews, W NW NW Sec. 12-20s-36.
Drlg. 2,985 ft.

Jeffers Oil Co.'s No. 1 Britt, C SE NW Sec. 31-20s-37.
T.D. 760 ft. in red sandy shale; 5 bailers of water per hour at 585-95 ft.; pulling 12½-in.

### Eunice Area

Shell Petroleum Corp.'s No. 1-A State, C SE NE Section 12-21-35 was completed. It had been drilled to 4,404 feet, but was plugged back to 3,926 feet, and shot with 260 quarts at 3,860-3,910 feet. It pumped 75 bbls. in 24 hours.

Atlantic Oil Producing Co.'s No. 1-G State, C SE SW Section 5-21-36, in proven territory at the north end of the pool, was completed as a small well at 3,890 feet, making 277 bbls. per day through the 2½-inch at 3,874 feet with 1,500,000 feet of gas. The top of the pay was at 3,806 feet and the elevation is 3,579 feet.

Humble Oil & Refining Co.'s No. 4-B State, C NW NE Section 20-21-36, after treating with caustic soda at 3,900 feet, total depth, to kill off gas, ran the 2½-inch to bottom with packer at 3,880 feet and perforated below and swabbed in. It averaged 24 bbls. per hour for three hours through the 2½-inch with a gas ratio of 4,150/1 and 250 pounds pressure on the tubing. Then in a test through the tubing on a one-quarter inch choke, it made 12 bbls. an hour with 850 pounds pressure. It was treated with 2,000 gallons and on a one-quarter inch choke made 9½ bbls. an hour with 1,150 pounds pressure on the tubing. The gas-oil ratio was 5,900/1.

Corrected location of Phillips Petroleum Co.'s No. 1 Woolworth, Block 3, puts it in the Jal area instead of east of the Eunice Pool.

Atlantic Oil Prod. Co.'s No. 2-C State, C SE SE Sec. 5-21-36.
Total depth 3,810 ft.; drill stem test showed 360 ft. oil and 180 ft. drilling fluid; set 7-in. csg.

Atlantic Oil Producing Co.'s No. 1-D State, C NW SE Sec. 20-21s-36e.
Rigging up.

Atlantic Oil Prod. Co.'s No. 2-G State, C SW SW Sec. 5-21s-36e.
Set 12½-in. at 79 ft. with 100 sacks and R.U.R.

California Co.'s No. 1 State, location 2. C SW SE Sec. 20-21-36e.
Drlg. 2,710 ft.

California Co.'s No. 2 Meredith, C SE SE Sec. 19-21s-36e.
Set csg. at 1,492 ft.

Continental Oil Co.'s No. 8-A-4 Meyers, C NW SW Sec. 8-21s-36e.
Rigging up.

Continental Oil Co.'s No. 17-B-1 Meyers, C NE SE Sec. 17-21s-36e.
Rigging up.

Continental Oil Co.'s No. 8-B-3 Meyers, C SW NW Sec. 8-21s-36e.
Drlg. 1,380 ft.

Continental Oil Co.'s No. 18-A-3 Meyers, C NE SE Sec. 18-21s-36e.
Location.

Continental Oil Co.'s No. 18-A-3 Lockhart, C NE SW Sec. 18-21s-36e.
Location.

Continental Oil Co.'s No. 20-C-5 State, C SW SW Sec. 20-21-36.
T.D. 3,932 ft.; pay at 3,869-3,932 ft.; flowed 150 bbls. in 1 hr. through csg. with 22,000,000 ft. of gas; testing.

Continental Oil Co.'s No. 9-B-4 Meyers, C NE NW Sec. 9-21-36.
T.D. 3,884 ft.; tested 150 bbls. per day with 10,000,000 ft. gas open; well rerun tubg. with packer; bldg. pumper derrick.

Gypsy Oil Co.'s No. 1 Orcutt, C SE NW Sec. 5-21-36.
Drlg. 920 ft.

Gypsy Oil Co.'s No. 2 Houston, C NE SE Sec. 7-21s-36e.
Drlg. 3,085 ft.

Humble O. & R. Co.'s No. 5-B State, C SW NE Sec. 29-21s-36e.
Derrick up; moving in tools.

Humble O. & R. Co.'s No. 4-B State, C NW NE Sec. 29-21-36.
T.D. 3,900 ft.; tested 9½ bbls. per hour with ¼-in. choke on 2½-in. tubg., will deepen.

Jim Murray's No. 1 Wallace, SW SW SW Sec. 3-21s-36e.
T.D. 65 ft., rigging up rotary.

R. Olson et al's No. 1 State, C NW SE Sec. 5-21s-36e.
Drlg. 1,730 ft.

Ohio Oil Co.'s No. 1 State-Maxwell, C NE NW Sec. 16-22-36.
Drlg. 3,360 ft., show of oil and gas 3,072-89 ft.

Repollo Oil Co.'s No. 3 Adkins, SW SW SE Sec. 9-21-36.
Drlg. 2,665 ft. in anhydrite.

Shell Pet. Corp. and Devonian Oil Co.'s No. 2 State, C NW NE Sec. 20-21s-36e.
Drlg. 3,780 ft.

Texas Pacific Coal & Oil Co.'s No. 1-A State, Acct. 2, C SE SW Sec. 9-22-36.
Drlg. 3,350 ft.

Twin State Oil Co.'s No. 1 Record, C NW NW Sec. 23-22s-36e.
Spudded and S.D.

### Cooper Area

Amon G. Carter and others' No. 1 Mattix, C SE NW Section 3-24-37, a wildcat 6 miles northeast of the Cooper Pool, a discovery, was completed at 3,658 feet after plugging back from 3,913 feet. It was shot with 160 quarts at 3,500-58 feet and flowed 43 bbls. per day through the 2½-inch at 3,654 feet with packer at 3,385 feet. The top of the pay was at 3,506 feet and the elevation is 3,258 feet. The oil tests 38.7 gravity.

Stanolind Oil & Gas Co.'s No. 4-A Meyer, 1,980 feet from S and W lines of Section 22-24-36 was completed. It pumped 155 bbls. of oil and 700 bbls. of water in 24 hours. Casing was set at 3,188 feet and drill stem tests were made from 3,575 feet down to 3,608 feet. At 3,620 feet the hole filled 3,250 feet with sulphur water and was plugged back to 3,537 feet, which became the total depth.

Humble Oil & Refining Co. made two locations in the north end of the field in Section 10.

Atlantic Oil Prod. Co. and Kirby Pet. Co.'s No. 1 Woolworth, C SW NE Sec. 26-24-36.
T.D. 3,481 ft.; top pay 3,462 ft.; flowed through 2½-in. into pits; 3,744 bbls. in 24 hrs., cut 6 per cent with water and 5,000,000 ft. gas.
Continental Oil Co.'s No. 14-A-5 Vaughn, C NW NW Sec. 14-24-36.
Drlg. 3,210 ft.
Continental Oil Co.'s No. 14-A-6 Vaughn, C NE SW Sec. 14-24s-36e.
Location.
Continental Oil Co.'s No. 14-A-4 Vaughn (formerly No. 14-4-A), C NW SW Sec. 14-24-36.
Drlg. 1,759 ft.
Continental Oil Co.'s No. 14-A-3 Vaughn, C SW NW Sec. 14-24-36.
T.D. 3,510 ft., in lime; drill stem test 3,493-3,510 ft.; est. 50 bbls. per hour.
Continental Oil Co.'s No. 15-A-2 Vaughn, C SW SE Sec. 15-24-36.
Location.
Continental Oil Co.'s No. 23-A-2 Gates, C NW NW Sec. 23-24-36.
Rig.
Continental Oil Co.'s No. 27-A-1 Gates, C SE SE Sec. 27-24s-36e.
Location.
Gypsy Oil Co.'s No. 1 Cooper, C SW SW Sec. 11-24s-36e.
Drlg. 3,447 ft.; drill stem test 3,110-47 ft.; 3,000 ft. gas.
Gypsy Oil Co.'s No. 2 Cooper, C NW SE Sec. 23-4s-36e.
Set 13⅜-in. csg. 292 ft. T.D.
Humble O. & R. Co.'s No. 1 Cooper, C SE NW Sec. 14-24s-36e.
T.D. 3,442 ft. in lime; 7-in. parted 1,270 ft. from top; gas show 3,060-75 ft.; fishing.
Humble O. & R. Co.'s No. 2 Moseley, C NW SE Sec. 10-24s-36e.
Rig.
Humble O. & R. Co.'s No. 1 Moseley, C SE SE Sec. 10-24-36.
T.D. 3,575 ft. in lime; flowed 26 bbls. per hour through tubing, will re-set tubing.
Humble O. & R. Co.'s No. 3 Coats, C NW NW Sec. 10-24s-36e.
Drlg. 3,375 ft.
Humble O. & R. Co.'s No. 4 Coats, C NE NE Sec. 10-24-36.
Cellar and pits.
Phillips Pet. Co.'s No. 16 Woolworth, C NE SE Sec. 27-24s-36e.
Set 12½-in. csg. 227 ft.
Skelly Oil Co.'s No. 1 Coats, C SW SE Sec. 3-24-36.
Top Brown lime 2,378 ft.
Tide Water Oil Co.'s No. 1 Woolworth, C SW NE Sec. 26-24-36.
T.D. 3,494 ft. (S.L.M.) 2-in. at 3,494 ft.; packer at 3,483 ft., swabbed 1 pct. oil and 99 pct. water; will plug back.
Simms Oil Co.'s No. 1 Coats, C SW NE Sec. 10-24s-36e.
Derrick up; moving in rotary.

### Jal Area

Three completions in the Jal area included two in the Jal Pool and another 2½ miles east of production. The later, a wildcat, is R. H. Henderson and others' No. 1 Langlie, C SE SE Section 8-25-37, which was completed at 3,454 feet with an increase in oil at 3,440-51 feet. It gauged 70 bbls. in 24 hours through the 5½-inch at 3,194 feet with 3,500,000 feet of gas. It is shut in for pipe line connections. The elevation is 3,162 feet. It is on acreage assigned by Stanolind Oil & Gas Co.

Byrd-Frost, Inc.'s No. 1-A Wells, SE cor. NW Section 12-25-36, a farm out from Continental Oil Co., was completed at 3,338 feet and flowed 120 bbls. in 24 hours through the 2½-inch with packer at 3,319 feet and 5,250,000 feet of gas. The elevation is 3,199 feet.

Gypsy Oil Co.'s No. 1 Arnott, C NE NW Section 2-25-36, was completed at 3,504 feet after plugging back from 3,524 feet and in a swabbing test made 77 bbls. in 24 hours, 16 per cent water, through the casing. It is estimated at 50 bbls. a day. Elevation is 3,254 feet.

Byrd-Frost, Inc.'s No. 2-A Wells, SW SW SE Sec. 12-25-36.
Location.
Continental Oil Co.'s No. 12-A-1 Wells, SW NE NW Sec. 12-25s-36e.
T.D. 3,448 ft.; ran 2½-in. to 3,447 ft. with packer at 3,430 ft.; swabbed 4 bbls. per hr.; preparing to pump.
Harry Leonard's No. 1-B Justis, SW NW NW Sec. 20-25-37.
T.D. 2,662 ft.; R.U.R.
Gypsy Oil Co.'s No. 1-B Arnott, NW SW SW Sec. 32-25-37.
T.D. 3,400 ft.; P.B. to 3,240 ft.; ran 2½-in. to 3,065 ft.; testing.
Gypsy Oil Co.'s No. 1-A Vinson Ramsey, C SE SE Sec. 12-26-36.
T.D. 3,228 ft.; P.B. to 3,100 ft. and testing.
R. H. Henderson et al's No. 1 Ogg, C NW NE Sec. 11-25-36.
Spudded and S.D.
Jeffers Oil Co.'s No. 1 Carlson, C NW SE Sec. 27-25-37.
Drlg. 2,290 ft.
Phillips Pet. Co.'s No. 1 Woolworth, Blk. 2, C SW SW Sec. 6-25s-37e.
Drlg. 500 ft.
Tide Water Oil Co.'s No. 1 Coats, SE SE NW Sec. 31-25-37.
T.D. 3,332 ft.; W.O. pumping equipment; flowed 120 bbls. per day, 15 per cent water, 750,000 ft. gas, stopped flowing.

### Hobbs Area

Shell Petroleum Corp. has a near completion in its No. 4 Berry, NE SW SE Section 31-18-38, a flank well in an area which has been showing water. At 4,225 feet, total depth, it flowed 150 bbls. of fluid an hour through the tubing, 30 per cent water, before acidizing. After treating with 2,000 gallons, it swabbed and flowed 100 bbls. an hour through the 3-inch at 4,224 feet, 97 per cent water. It will run packer.

Amerada Pet. Corp. and Skelly Oil Co.'s No. 2-E State, NE NW NW Sec. 24-18s-37e.
Drlg. 2,953 ft.
Continental Oil Co.'s No. 4 Grimes, SW NE SE Sec. 28-18-38.
T.D. 3,858 ft.; fshg. for drill pipe.
Samedan Oil Co.'s No. 2-B Moom, 1,315 ft. from N line and 1,120 ft. from E line, Sec. 28-18s-38e.
Cellar and pit.
Samedan Oil Co.'s No. 2 Byers, CWL SW NW Sec. 3-19s-38e.
Set 12½-in. at 197 ft. and R.U.R.
Samedan Oil Co.'s No. 1-B State, CEL SE NW Sec. 25-18s-37e.
T.D. 3,789 ft.; fishing for bit.
Samedan Oil Co.'s No. 4-C State, 1,315 ft. from S and W lines, Sec. 24-18s-37e.
T.D. 268 ft.; S.D.
Gypsy Oil Co.'s No. 4 Graham-State, C NW NE Sec. 24-18-37.
T.D. 4,230 ft., testing.
National Securities Oil Co.'s No. 1 Linam, NE SE SW Sec. 33-18-37.
T.D. 4,506 ft.; P.B. to 4,238 ft.; 1,000 ft. oil, 300 ft. water in hole.
Shell Pet. Corp.'s No. 4 Nora Berry, 1,325 ft. W of E line and 1,315 ft. N of S line, Sec. 31-18-38.
Swabbed 7,200 bbls. of fluid in three days, after acidising 95 per cent water, set packer with perforations below, produced 120 bbls. of oil per hour, no water.
Shell Pet. Corp.'s No. 2 Turner, 1,020 ft. from N line and 2,316 ft. from E line, Sec. 24-18-38e.
Drlg. 2,775 ft.
Shell Pet. Corp.'s No. 2 Rice, C SW SE Sec. 13-18s-37.
T.D. 3,960 ft.; set 7-in. csg.
Stanolind O. & G. Co.'s No. 11 Capps, C NE SW Sec. 3-19s-38e.
Drlg. 3,610 ft.

### Lea Area

Another wildcat in the Lea area proved a failure in the Argo Royalty Co.'s No. 2 Burner, C SE SE Section 8-20-32, which was abandoned at 2,803 feet in sand. It had sulphur water at 2,798-2,803 feet, rising 1,400 feet in four hours. The elevation is 3,484 feet. Location is 2½ miles southeast


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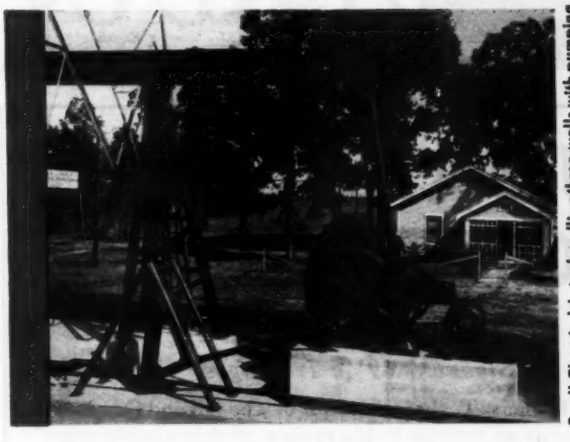

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of same company's No. 1 Burner, abandoned last March.

Culberson & Irwin's No. 1 Sue Richards, C SW SE Sec. 10-21s-32e.
Spudded to 12 ft.

Culberson & Irwin's No. 1 Eva Brown, C NE NE Sec. 23-21s-32e.
Running 12½-in. csg. to 500 ft.

**Caprock Area**

Vierson & Brown's No. 1 Robinson, C NW SE Sec. 14s-11s-32.
Standing; rig completed.

**Maljamar Area**

Maljamar Oil & Gas Co.'s No. 1 Simon, C NE NE Sec. 29-17s-32e.
Location.

**Bernalillo County**

Norins Realty Co., Inc.'s No. 1 Gallegan grant, C NW NW Sec. 19-11n-4e.
T.D. 500 ft.; trying to cement pipe and test show of carbon dioxide gas.

**Chaves County**

Comanche Drlg. Co.'s No. 2 Sloop-Purcell, C NE NE Sec. 15-11s-26.
Location.

Los Chaves Dev. Co.'s No. 1 Government, C NE Sec. 2-8s-23.
Spudded and S.D.

John Tannehill's No. 1 Campbell, NE SE NE Sec. 1-11s-25.
T.D. 801 ft.; 8¼-in. parted; drlg. by tools.

Warman Oil Trust's No. 1 Weldon & Hoar, NW NW SE Sec. 9-14-25.
T.D. 1,683 ft. in sand; P.B. to 1,410 ft.; to test oil show at 1,390 feet.

## Eddy County

**The only new oil well in Eddy County was Barnsdall Oil Corp.'s No. 2 Dodd, C NE SE Section 22-17-29, which flowed 100 bbls. in 24 hours through the 2½-inch at 2,930 feet, total depth. It was treated with 2,000 gallons of acid, but showed no increase. One dry hole is listed below.**

R. D. Compton et al's No. 6 Mann, NW SW NE Sec. 4-18-27.
Drlg. 989 ft. in gypsum.

Coronado Exploration Co.'s No. 1 Anderson, C NE NW Sec. 13-20s-23.
S.D. 1,462 ft.

Dooley & Shank's No. 1 McClay, C NE SE Sec. 33-18-30.
Drlg. 2,985 ft., in lime.

Dooley et al's No. 1 Commerce Trust, NW NE SW Sec. 8-20-27.
T.D. 700 ft.; fishing 2 joints of 6¼-in.

Emperor Oil Co.'s No. 2 Puckett, C NW NE Sec. 24-17-31.
Rig and tools.

Flynn, Welch & Yates' No. 4 Yates, C SE NE Sec. 6-20-27.
T.D. 2,006 ft.; 1,700 ft. sulphur water in hole; plugged back to 1,470 ft.

Getty Oil Co.'s No. 7 Dooley, SW SW NW Sec. 24-20-29.
T.D. 6,052 ft.; rigging up cable tools.

R. G. Patillo's No. 1 Thomason, SE SE NE Sec. 12-20-28.
T.D. 1,015 ft. in lime; will run 6¼ in.

Pecos Valley Gas Co.'s No. 1 Hastie, SE NW NE Sec. 17-17-28.
Dry and abandoned 1,884 ft.

Rampo Oil Co.'s No. 1 State, CNL NE SE Sec. 32-17-28.
S.D. 2,232 ft. in lime; prep. to resume.

Red Lake Oil Co.'s No. 5 State, NW NW NE Sec. 27-17s-28e.
Spudded.

Repollo Oil Co. and C. J. Dexter's No. 3-X Parke, SE SE SE Sec. 15-17-30e.
Drlg. 1,875 ft. in anhydrite, G.S. 1,734-35 and 1,787-1,817 ft.; O.S. 1,755 ft.

Tignor, Etz & Keyes' No. 2 Keyes, C NE SW Sec. 10-17-28.
Drlg. 1,490 ft.

Van P. Welch's No. 1 State, 320 ft. out of NW cor. Sec. 23-17s-28e.
R.U. machine.

Yates & Dooley's No. 1 Creek, C SW SE Sec. 35-18-30.
Location.

**DeBaca County**

Ralph Burlingame et al's No. 1 Woods, NE SW SW Sec. 6-4n-20e.
T.D. 4,622 ft.; moving in cable tools to complete.

**Guadalupe County**

Anton Chico Dev. Co.'s No. 2 fee, NW NE SW Sec. 20-9n-17.
S.D. 900 ft.; changing over to cable tools.

**McKinley County**

Bennett & Lingfelter's No. 1 Lark Drlg. Co., NE NE NW Sec. 29-20-9w.
S.D. 560 ft. in sand; est. 20 bbls. daily at 469-72 ft. and 554-60 ft.

A. C. Kittel's No. 1, NW NW Sec. 32-20-9w.
Material on ground.

R. W. Sanderson et al's No. 1, NE SW Sec. 21-20-9w.
Material on ground.

David K. Stacey's No. 2 Webber, SW NW Sec. 29-20-9w.
Rig on ground.

**Otero County**

Flynn, Welch & Yates' No. 1 Donahue, 660 ft. from N and 1,980 ft. from E lines Sec. 28-24-15.
Dry and abnd. in granite at 1,692 ft.

**Quay County**

Quay County Dev. Co.'s No. 1, C SE SW Sec. 19-7n-33e.
Drlg. 600 ft.; show of gas.

**Rio Arriba County**

El Verdo Structures Property Co., Ltd.'s No. 1-A Tierra Amarilla grant, NE Sec. 26-2s-1e (unsurveyed).
Rigging up.

**Roosevelt County**

Claudell Dev. Co.'s No. 1 Wilmes, C SW SE Sec. 21-2s-30.
T.D. 3,655 ft.; P.B. to 3,385 ft.; shot at 3,280 ft. to part 5 and 6-in.; will rerun 6-in. to 3,340 ft. and acidize at 3,340-60 ft.

R. M. Hancock et al's No. 1, 33 ft. from W line and 1,000 ft. from N line, Sec. 21-1n-37.
Drlg. below 200 ft.

**Sandoval County**

Continental Oil Co.'s No. 1 L-Bar Cattle Co. 630 ft. N of E ¼ cor. Sec. 8-13n-4w.
Drlg. 2,841 ft. hard sand.

**San Juan County**

Aztec Coop. Oil Co.'s No. 1 Aztec, SE SW Sec. 10-30n-11w.
Material on ground.

J. F. Cross et al's No. 1 Wilson, SW SW SE Sec. 17-30-11w.
S.D. 810 ft.

Cross & Poole's No. 1 Aztec, Sec. 1-30-11w.
Making water shutoff at 740 ft.

A. E. Haney's No. 1 Hare, SE SE Sec. 14-20-11w.
Drlg. 680 ft.

Kutz Canon O. & G. Co.'s No. 1 Day, SW SW SW Sec. 20-28-10.
Drlg. 4,389 ft.; increase in gas.

R. C. Oswell's No. 4 Government, SW NW NE Sec. 34-30-11w.
S.D. 1,790 ft.

R. C. Oswell's No. 6 Government, SE NE Sec. 33-30-11w.
Spudded and S.D.

Phillips & Spence's No. 2 Martin, NW SE SW Sec. 34-30n-11w.
Drlg. 1,110 ft. in shale; 8¼-in. at 80 ft.; 5-3/16-in. at 720 ft.

Reserve Oil Co.'s No. 6 Shaffer, SE NE SE Sec. 36-22n-14w.
Location.

San Juan Pet. Co.'s No. 1 Lemley, NE SE SE Sec. 32-30-11w.
S.D. 1,314 ft.

Nick Spatter's No. 1 fee, C NE SW Sec. 32-31-11w.
U.R. 8¼-in. to 1,480 ft.; drlg. at 1,500 ft.

H. C. Stratton's No. 1 Hart, SW NE SE Sec. 25-30-12w.
Abd. at 1,680 ft.

W. R. Webb's No. 1 fee, CEL NE NW Sec. 6-30-11w.
P.B. from 1,500 ft. to 1,350 ft.; set pipe and preparing to test.

**San Miguel County**

Cabra Springs O. & G. Co.'s No. 1 Thompson, SW NE NE Sec. 22-12n-22e.
Drlg. 4,067 ft.

Cabra Springs O. & G. Co.'s No. 2 West Pino Mesa, SW SW SW Sec. 31-12-22.
Drlg. 760 ft.

Pioneer Oil Co.'s No. 2 Montezuma, CSL SE SW Sec. 14-15n-16.
Drlg. 300 ft.

Starr-Kennedy Oil Co.'s No. 3 Adams, NE NE SE Sec. 25-17-16.
Standing at 5,090 ft. after completing rig; to resume following fire.

Holmberg Interests' No. 1 Cantwell, NW NW NW Sec. 5-10n-9e.
S.D. 810 ft. (corrected).

Kelsey Clients Dev. Estate's No. 2 State, C NW Sec. 32-10n-10e.
S.D. 1,450 ft.

**Torrance County**

48 Pet. Co.'s No. 1 Greenfield, C NW SW Sec. 17-9n-8e.
Drlg. 550 ft.; landed 10-in. at 400 ft.

**Union County**

Sierra Grande Oil Corp.'s No. 1 Rogers, C NE SW Sec. 4-29-20.
T.D. 2,615 ft.; running 8¼-in.; more gas, est. 500,000 ft.; total gas est. 1,500,000 ft.

**Valencia County**

Pres-Sel Dev. Co.'s No. 1 Morris, SE NE Sec. 30-12n-10w.
Drlg. 600 ft.

Ringle Dev. Co.'s No. 2 Tome grant, C NE SE Sec. 20-6n-3e.
Rigged and S.D.

Ringle Dev. Co.'s No. 1 Tome grant, C SE SE Sec. 36-6n-3e.
S.D. 400 ft.

Western Natural Resources Corp., Inc.'s No. 2 San Clemente, SE SE NW Sec. 5-6n-1e.

## COLORADO

**Adams County**

Riddle Pet. Co.'s No. 1 Baxter, C SW Sec. 2-2s-66w.
Standing partly rigged and drlg. wtr. well; T.D. 940 ft.; 6¼ ft. cmt. at 900 ft.; drlg. plug.

**Archuleta County**

Wm. E. Hughes Est.'s No. 1 fee, SW Sec. 24-33n-2e (unsurveyed).
T.D. 837 ft.; running and U.R. 8¼-in.

Oil City Pet. Co.'s No. 1-A Garnett, NW NE NW Sec. 25-33n-2e.
Drlg. 1,271 ft. in blue shale; carrying 6¼-in. at 1,265 ft.

Navajo Oil Co.'s No. 1 Crowley, SW SW NE Sec. 11-32n-1e.
Drlg. 800 ft.

**Baca County**

J. H. Everett et al's No. 1, 330 ft. NW cor. Sec. 24-32-48.
Spudded wtr. well.

**Boulder County**

Leslie R. Steele et al's No. 1 Maxwell, SW NE NW Sec. 24-1n-71.
Drlg. 1,545 ft.

**Elbert County**

Ramsey Pet. Corp. and C. E. Lambert's No. 1, near C Sec. 18-8s-57w.

**Fremont County**

Waterville Oil Co.'s No. 1 State, SE SE NW Sec. 16-18s-69w.
T.D. 2,780 ft.; 150 ft. of oil in hole; U.R. 6 3/16-in. at 2,750 ft.

**Grand County**

Colorado Oil Ref. Co.'s No. 1 Linke, NE SW SW Sec. 13-1n-77w.
Drlg. 2,200 ft.

Interstate O. & G. Co.'s No. 1 Hinman, NE SE NW Sec. 11-2n-81.
S.D. 2,997 ft.

**Huerfano County**

S. W. Pressey's No. 1 Ojo, SW NE Sec. 10-26-69.
S.D. 2,550 ft.

**Jackson County**

Colorado Oil Ref. Co.'s No. 1 North Park Coal, NW NW Sec. 18-9n-78.
T.D. 1,805 ft.; landed 16¼-in. at 150 ft.; running and U.R. 12½-in.

Continental Oil Co.'s No. 3 Hoye, NW NW NE Sec. 34-9n-78.
Drilled to 3,625 ft. and reamed to 3,313 ft.

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### Jefferson County

Ruby Hill O. & G. Co.'s No. 1 Braden, SE cor. Sec. 24-4s-69.
S.D. 4,280 ft.

### Las Animas County

Mountain State Oil Corp.'s No. 1 Nickols, C NE SE Sec. 10-34-62.
S.D. 1,640 ft.

### Lincoln County

Consolidated Smelting & Metals Co.'s No. 1 Hancock, NE NE SW Sec. 7-17s-52.
T.D. 1,700 ft.; fshg. for bailer.

### Moffatt County

Stanolind O. & G. Co.'s No. 5-S Parkinson, NW cor. SE Sec. 22-4n-92.
Derrick up; waiting on tools.
Texas Co.'s No. 2 Iles Investment, 620 ft. S of N line, and 220 ft. E of W line, Lot 4, Sec. 23-4n-92.
Drlg. 3,250 ft.; top Dakota 2,834 ft.
Mountain Fuel Supply Co.'s No. 1 Murdock, SE SE NE Sec. 24-12n-101.
Some material on location.

### Montezuma County

McElmo Oil Co.'s No. 1 West, NE NW NE Sec. 21-36n-17w.
T.D. 3,131 ft.; pulled 4½-in. and U.R. 6⅝-in.

### Morgan County

Swisher et al's No. 1 Lunt, 92 ft. W of E line and 360 ft. N of S line, Sec. 3-4n-60.
Ran 4½-in. to 820 ft. and drlg. ahead.

### Park County

South Park Oil Co.'s No. 1 State, SE SE SW Sec. 19-11s-75.
Set 8¼-in. at 2,072 ft. and drlg. ahead.

### Prowers County

Trojan O. & G. Co.'s No. 1 Lotus Oil, NW NE NE Sec. 15-23-46.
Drlg. below 5,227 ft.

### Routt County

Mid-Colo. Pet. Co.'s No. 1 Omholt, NE NE SE Sec. 29-4n-87w.
T.D. 2,750 ft.; preparing to run 8¼-in. to bottom water in Dakota; show of gas at 2,750 ft. on top Lakota.

## WYOMING

### Albany County

California Co.'s No. 2 Holst, SW NE SE Sec. 13-17n-77.
Drlg. 1,005 ft.
California Co.'s No. 1 Wilson, NW SW SW Sec. 18-17n-76.
Standing cmtd. at 182 ft.
Ohio Oil Co.'s No. 1 Two Rivers Land & Cattle, SW SW NE Sec. 8-17-74.
Drlg. 1,930 ft. in Muddy sand and showing water.

### Big Horn County

J. W. Bales' No. 1 Parker, C SW SW Sec. 23-49-89.
S.D. 125 ft.
Peter Evanoff's No. 1 Griffin, Lot 60, Sec. 4-55-97.
S.D. 1,594 ft.
Peter Evanoff et al's No. 1 McAllister, Lot 50, NW NE SE Sec. 3-55n-97w.
Drlg. 200 ft.
W. S. Gilbert's No. 1 Zaring, SE SE SE Sec. 35-52n-93w.
Drlg. 830 ft.
McAlpine O. & G. Co.'s No. 2, SE SE NW Sec. 3-55n-97w.
Moving in materials.
Ohio Oil Co.'s No. 2 Sian Canal, C SW SW Sec. 24-56-97.
T.D. 5,264 ft.; 7-in. at 5,053 ft.; drlg. plug.
Ohio Oil Co.'s No. 3 Byron Union, SE NW NE Sec. 22-56-97.
Drlg. 3,924 ft.
Ohio Oil Co.'s No. 4 Byron Union, SW NE Sec. 22-56-97.
Rig up.
Ohio Oil Co.'s No. 3 Sessions, NW SW NW Sec. 33-56n-97w.
Derrick up.
J. H. Shaffer's No. 1 Keachie, C SW SW Sec. 7-49-91.
Drlg. 1,000 ft.; wtr. sand at 709-30 ft.
Taylor Oil Co.'s No. 1 Hoskins, Lot 5 (SE SE), Sec. 25-56-97.
C.O. to bottom at 5,275 ft. and making new hole.
Wyoming O. & R. Co.'s No. 1 Evans, NE NE NW Sec. 12-49-91.
Set 12½-in. at 85 ft. (cor.) and S.D.

### Carbon County

Ohio Oil Co. and California Co.'s No. 2 State, C NW NW Sec. 36-21n-79w.
Drlg. 1,800 ft. in shale.
Ohio Oil Co. and California Co.'s No. 1 Union Pacific, Acct. J, NE SW NW Sec. 25-21n-79w.
Derrick up; W.O. tools.
Ohio Oil Co.'s No. 4 Diamond Cattle, SE SW NW Sec. 35-20-78.
Drlg. 3,233 ft. in Sundance; showing oil.
General Pet. Corp.'s No. 1 Whitford, SW SE SE Sec. 24-20-84.
Drlg. 4,600 ft.
General Pet. Corp.'s No. 1 Union Pacific, C SW SW Sec. 19-20-83.
S.D. 5,931 ft.; may be deepened.

### Converse County

Chadron-Osage Oil Co.'s No. 1 State, SW cor. Sec. 16-32-69.
Cmtg. 15½-in. at 1,550 ft.
Continental Oil Co.'s No. 60 State, NW SW NE Sec. 9-33-76.
Rigging.
Continental Oil Co.'s No. 9 Whiteside, 3,680 ft. S of N line and 1,072 ft. W of E line, Sec. 7-33-76.
Coring 4,008 to 4,024 ft. in black shale.
Otto Olson et al's No. 1 Carey, Sec. 6-32-74.
S.D. 642 ft.
John Ackard's No. 1 Daniels, SW SW SE Sec. 17-32-71.

### Crook County

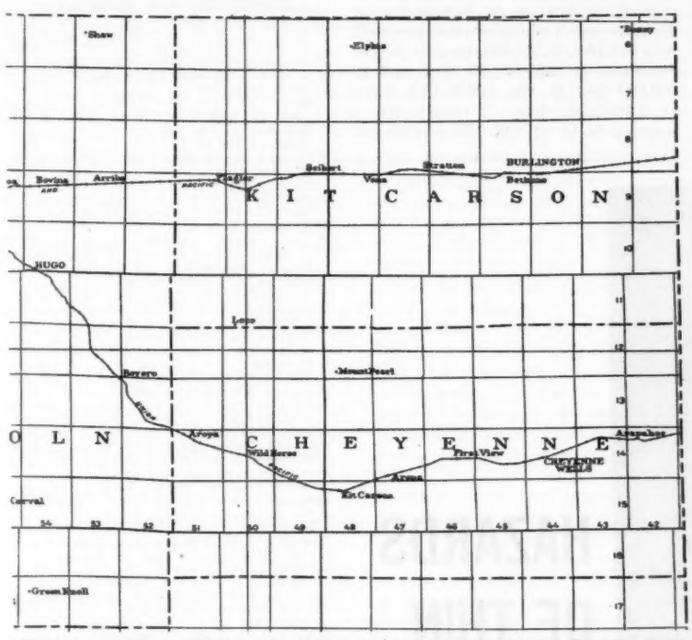
Dr. R. B. Kinter's No. 1 Rockford-Wyoming, CNL NE SE Sec. 13-52n-62w.
Drlg. 1,330 ft.; top of Whitewood at 1,300 ft.; will run 5 3/16-in. and test.

### Fremont County

Mid-American Oil Co.'s No. 3 Government, NW NE SW Sec. 24-28-92.
Drlg. at 500 ft.
Monongahela Oil Co.'s No. 1 Wisda, NE SE SE Sec. 13-28-93.
S.D. 4,150 ft. for water.
Nelson & Poupiert's No. 5 Enos, Lot 7, Sec. 27-3n-1w.
Drlg. 180 ft.

## Hot Springs County

**The Argo Oil Co.'s No. 16 Ellen, NE SE NW Section 14-44-98, Hamilton Field, pumped 50 bbls. initial from the Embar at 2,555-2,683 feet and averaged 22 bbls. on the 10-day test. It was then shut in to acidize with 2,000 gallons. Two old wells also were acidized. No. 17 Ellen, SW NW Section 14, increased from 50 to 100 bbls. a day after treating with 1,500 gallons, and No. 19 Bradford, NE SW Section 13-44-98, increased from 35 to 65 bbls. after treating with 1,000 gallons. Both of the old wells will be treated with heavier doses.**




Eastern portion of Colorado along right of way of Union Pacific Railroad where the Gypsy Oil Co. recently leased several thousand acres of land and is now checking it by geophysical methods

Argo Oil Co.'s No. 1 Rathvon-Government, NE SW NW Sec. 14-44n-98w.
Drlg. 825 ft.
California Exploration Co.'s No. 2 Government, NW SW NW Sec. 7-44-96.
Drlg. 2,518 ft.
Ohio Oil Co.'s No. 72 Mills'ron Cattle Co., NE SE SE Sec. 19-46n-98w.
Derrick.
Oscar G. Grace's No. 1 Government, SW NW NW Sec. 21-43-92.
Drlg. 421 ft.

### Lincoln County

Senrab Oil Co.'s No. 3 Government, N SE NW Sec. 10-26-113.
S.D. 1,011 ft.
Superior-Wyoming Oil Co.'s No. 2-B, Lot 2 (NW NW), Sec. 3-26n-113w.
Drlg. 700 ft.

## Niobrara County

**The Ohio Oil Co.'s No. 2 Lamb, NE NW NE Section 5-35-65, Lance Creek Field, which was completed in the first and second benches of the Sundance at 3,707 feet, total depth, is rigging up pumping unit and no estimate of capacity has been released. It did not go to the third bench where the flowing wells are completed. The Ohio company made another location in its No. 5 Converse Sheep, C SE SW Section 32-36-65, almost on the apex of the dome. It will be drilled to the third Sundance.**

Argo Oil Co.'s No. 4 Elliott, C NE NW Sec. 5-35n-65w.
Drlg. 3,169 ft.
Black Hills Ref. Co.'s No. 1 Wright, SE SE SW Sec. 23-36-94.
Some material on location.
Continental Oil Co.'s No. 2 Schuricht, C SE NE Sec. 9-35-65.
T.D. 3,872 ft.; drilled saturated Sundance sand at 3,781-3,839 ft.; set pipe and drlg. plug.
Continental Oil Co.'s No. 5 Rohlff, 550 ft. E of W line and 580 ft. N of S line, SW Sec. 31-36n-65w.
Derrick up; M.I. rotary tools.
Interstate O. & R. Co.'s No. 1 Morrell, NW NE SE Sec. 9-39-61.
T.D. 3,030 ft.; P.B. to 2,835 ft. and preparing to acidize.
Fall River Royalty & Producers Co.'s No. 3-I, CEL NE NE Sec. 2-39-61.
T.D. 385 ft.; shot and testing.
Fall River Royalty & Producers Co.'s No. 5-L Briggs, CSL NE NE Sec. 2-39n-61w.
Drlg. 210 ft.; show of oil at 220 ft. in Muddy.
Ohio Oil Co.'s No. 5 Converse Sheep, C SE SW Sec. 32-36n-65w.
Location.
Ohio Oil Co.'s No. 7 Lamb, C NW NE Sec. 5-35n-65w.
Ohio Oil Co.'s No. 2 Lamb, NE NW NE Sec. 5-35-65.
T.D. 3,707 ft.; 4½-in. at 3,642 ft.; R.U. pumping unit.
Ohio Oil Co.'s No. 4 Putnam, C SW SW Sec. 33-36-65.
Set 10¾-in. at 150 ft.; W.O.C.
S. & H. Dev. Co.'s No. 1-A Olinger, SE NE NW Sec. 1-36-63.
Cmtd. 5 3/16-in. on bottom at 1,550 ft.

## Park County

**The Continental Oil Co. has a good completion on the Frannie Dome in its No. 3 Northern Pacific, NW SE SE Section 23-58-98, in the Embar-Tensleep at 3,015 feet, total depth. It made 574 bbls. natural first 11 hours. It is in proven territory. The elevation is 4,460 ft.**

Geo. T. Beck's No. 1 fee, NW SE NW Sec. 27-33-101.
Resuming at 1,181 ft.
Garland Oil Co.'s No. 2 Government, SE NE NW Sec. 14-56-98.
S.D. 2,166 ft.
V. M. Kirk's No. 1 Connaghan, C NW SW Sec. 10-50-100.
1,320 ft. in shale.
Resolute Oil Co.'s No. 1 State, C NW SW Sec. 16-57-101.
S.D. 3,608 ft.

### Sheridan County

Beaver Creek Oil Synd.'s No. 1 Allison, SW SE Sec. 15-55-85.
S.D. 2,660 ft.

### Sublet County

Texas Co.'s No. 5-K, SE SE SW Sec. 34-27-113.
Cmtd. 7-in. at 631 ft.
Piney-LaBarge Oil Co.'s No. 2 Government, CEL NE NW Sec. 13-28-113.
Drlg. below 520 ft.

### Sweetwater County

Wyoming-California Pet. Co.'s No. 1 Government, SE cor. Sec. 20-16-104.
Cmtd. 8⅝-in. at 2,380 ft.

### Uinta County

General Pet. Corp. of Utah's No. 1 Union Pacific-Hayes, SW NW SW Sec. 29-14n-118w.
Resumed at 950 ft.

### Washakie County

C. L. Brome et al's No. 3 Government, SW NW NW Sec. 31-48-90.
Drlg. 1,534 ft.; show of gas.
Nystrom & Smoot's No. 2 State, SW NE NE Sec. 36-48n-90w.
Drlg. 1,530 ft.
Wyoming O. & R. Co.'s No. 1 Frison, NW SW NW Sec. 14-48-91.
S.D. 1,700 ft.

## Weston County

**The Federal Oil Co.'s No. 7, C SE SE Section 15-46-64, Osage Field, which flowed 20 bbls. initial, was shot and is pumping 50 bbls. daily.**

**Updike Brothers' No. 5, CEL NE SW Section 25-46-64, is pumping 10 bbls. from sand at 1,660-64 feet after a shot.**

**The Des Moines-Osage Syndicate has made a location for its No. 10 in Section 25-46-64, upon which nine old wells have been abandoned.**

Conway Oil Corp.'s No. 1 Government, C SE NW Sec. 7-41-60.
Running 6⅛-in. to 2,000 ft.
Karl Kundy's No. 3 Government, NW cor. NE Sec. 31-46-62.
Sands at 1,370-78 and 1,400-07 ft.; est. 25 bbls.; will deepen and shoot.
Beaver Creek Oil Synd's No. 1 State, C NE NE Sec. 23-44-63.
Drlg. 150 ft.
Des Moines-Osage Syndicate's No. 10, NE NE NE Sec. 25-46n-64e.
Rigging (first report).
La Lleishe Oil Co.'s No. 18 fee, C SW SW Sec. 17-46-63.
S.D. 500 ft. for repairs.

## MONTANA

**Four refinery employes were killed in a fire at the Yale Oil Co.'s refinery at Billings when a spark from a torch ignited inflammable material. The dead are Ersie Heiber, Billings; Jake Walker, Hardin; Ralph McDermott, Billings, and Leon Smith, Billings. Ten storage tanks of crude and road oil were destroyed. Two Billings firemen were overcome with gas and were taken to a hospital.**

### Big Horn County

Daniels Pet. Co.'s No. 1 May, C SE SE Sec. 13-1s-33e.
Drlg. at 560 ft.
Enterprise Oil Co. et al's No. 2 Lynde, SW SW SE Sec. 21-6s-35e.
Drlg. 3,700 ft.

### Carbon County

Bailey Round Butte Oil Co.'s No. 1, 1,120 ft. W of E line and 2,140 ft. N of S line, Sec. 3-6s-23.
Drlg. 1,304 ft.
Ohio Oil Co.'s No. 15 Montana Industrial, C NE NE Sec. 11-7s-21.
T.D. 4,350 ft.; will complete as a gas well in Frontier; C.O. and showing 7,000,000 ft. a day.

### Cascade County

C. Leonard Smith's No. 1, NE NE SW Sec. 14-22n-2e.
Fort Worth spudder on location.

### Choteau County

Mills & Decker's No. 1, NE NW Sec. 29-27n-13e.
Spudding.

## Fallon County

**The Montana-Dakota Utilities Co., subsidiary of the Minnesota Northern Power Co., has derrick up for its 7,000-foot test on the Baker-Glendive (Cedar Creek) anticline in eastern Montana. The location is in the NE NW of the broken Section 17-4n-62, in Fallon County, 2 or 3 miles west of the South Dakota line and on the southeastern end of the big uplift which runs to the northwest for close to 100 miles. It is at about the highest point on the structure as shown by both geological and seismograph**

surveys. It will be drilled with rotary equipment and the Rocky Mountain Drilling Co. has the contract. Rig will be moved from the Dry Creek Field.

Montana-Dakota Utilities Co.'s No. 1, NE NW Sec. 17-3n-62e.
Derrick (first report).

**Fergus County**

Button Butte O. & G. Co.'s No. 1 Woodward, SE SE SW Sec. 20-14n-24.
Drlg. 2,095 ft.
Emmons et al's No. 1, 220 ft. W of E line and 2,140 ft. N of S line, Sec. 6-20-18.
Drlg. 1,250 ft.
S. W. Pennock et al's No. 1 Nordheim, NW NE NE Sec. 6-21n-18e.
S.D. 480 ft. (corrected).

**Gallatin County**

Montana Gas & Pet. Corp.'s No. 1 Adams, SE SE SE Sec. 36-2n-1e.
Drlg. 2,400 ft.
Ben W. Ryan's No. 1 Tice, NE NE NE Sec. 28-1n-2e.

## Glacier County

There were six completions in the Cut Bank Field, one a flowing well, one a gas well and two abandoned and two average wells. The flowing well is C. P. Castle's No. 2 State, near C S half SW Section 36-35-6w, which made 200 bbls. in 24 hours from the pay at 2,771-76 feet. It is an inside location. A. B. Cobb's No. 1 Young, C SE NE Section 5-32-5w, in the southern part of the field in an area where only a few wells have been drilled, had production in all three sands and looks as if it will make a large well. Oil rose 700 feet from the Sunburst at 2,798-2,822 feet and increased to 1,000 feet from the upper Cut Bank at 2,825-45 feet and to 2,300 feet from the lower Cut Bank at 2,845-78 feet. The latter is the total depth. It will swab for a test and then may drill deeper as it did not enter the contact. The Consolidated Gas Co.'s No. 1 Arnold-State, C SW NE Section 26-35-6w, had only a show of oil in sand at 2,790-2,805 feet and was plugged and abandoned. R. C. Tarrant's No. 1 O'Brien, C SE SW Section 29-34-5w, between the oil and gas pools, 2 miles east of the nearest oil well and same distance south of the nearest gas well, was completed for 500,000 feet in the Sunburst at 2,590-2,635 feet and 4,000,000 feet in the lower Cut Bank at 2,680-2,722 fete. Tarrant's No. 1 Reutten-Wold, C NW NE Section 13-34-6w, had only a show in the lower Cut Bank at 2,745-77 feet and was plugged and abandoned. The Texas Co.'s No. 3 Yunck, C SE SW Section 14-35-6w, swabbed 64 bbls. in 19 hours at 2,874 feet, total depth.

Of four new locations released, the most interesting is the Texas Co.'s No. 1 Section 9 Unit, C NW SE Section 9-32-5w, in the southern extension where very little drilling has taken place and half a mile north of the same company's No. 1 State, the discovery well in the south extension.

Anderson's No. 2 Anderson, NW SE NW Sec. 26-35-6w.
Cmtg. cave at 2,725 ft.
Chas. Grant's No. 1 Askins, Lot 24, Blk. 33, Sec. 12-33-6w.
S.D. 2,700 ft.; (formerly Askin's No. 1 Askins).
Consolidated Gas Co.'s No. 2 State, C NW SE Sec. 26-35-6w.
Drlg. 1,930 ft.
Consolidated Gas Co.'s No. 8 Tribal, Lot 6, Sec. 10-34-6w.
Running 6⅝-in. to 2,903 ft.; good show of oil at 2,903-13 ft.
Consolidated Gas Co.'s No. 7 Tribal, Lot 5 (NW NE), Sec. 10-34n-6w.
Drlg. 1,800 ft.
Custer Oil Co.'s No. 1 Tweedy, 440 ft. from W line and 330 ft. from N line, NE Sec. 36-33n-6w.
Drlg. at 900 ft.
Goodstein & Smith's No. 1 Olson, C NE SE Sec. 26-34-6w.
Drlg. 1,600 ft.
Grant Oil Co.'s No. 1 Bakke, C NW NE Sec. 32-34-5w (formerly R. C. Jeffries).
Drlg. 2,375 ft.
L. R. Hannah, trustee's No. 2 State, 93 ft. from E line and 158 ft. from N line, Sec. 12-33n-6w.
Rig on loc. (first report).
R. C. Jeffries' No. 3 Lukens, 360 ft. N of S line and 1,540 ft. W of E line, Sec. 1-33n-6w.
Rig on loc. (first report).
Kately's No. 1 Thornson, SW NW SW Sec. 25-36-6w.
T.D. 2,791 ft.; 1,800 ft. of oil in hole with 2,000,000 ft. of gas.
Lawler & Hoer's No. 1 Downen, C SE SW Sec. 9-33-5w.
Drlg. 2,560 ft.
Montana Headlight Oil Co.'s No. 2 Britton, 660 ft. E of W line and 440 ft. N of S line, SE Sec. 11-34n-6w.
Cmtd. 10-in. at 548 ft.; Colo. at 505 ft.
Montana Power Gas Co.'s No. 1 Colburn, C SE SW Sec. 5-33n-5w.
Rigging.
Montana Power Gas Co.'s No. 1 Clapper Unit, SW SW SW Sec. 27-35n-5w.
Cmtd. 10-in. at 460 ft., 50 sacks; Colo. at 345 ft.
Montana Power Gas Co.'s No. 2 Bonnett, S SW NW Sec. 4-32-5w.
Drlg. 2,520 ft.
Olive Oil Co.'s No. 4 Winkler, 725 ft. S of N quarter cor. Sec. 35-35-6w.
Drlg. at 2,000 ft.
Santa Rita O. & G. Co.'s No. 2 McCabe, NW SE NE Sec. 31-33-5w.
Location.
Santa Rita O. & G. Co.'s No. 1 Stahl, C NW SE Sec. 20-33-5w.
Drlg. 1,785 ft.
Santa Rita O. & G. Co.'s No. 1 Savage, C NW SW Sec. 9-33-5w.
Drlg. 2,520 ft.
Santa Rita O. & G. Co.'s No. 5 Tribal, C SW NW Sec. 15-35-6w.
Drlg. 2,858 ft.
R. C. Tarrant's No. 4 Miller, C SE NE Sec. 24-34n-6w.
Location (first report).
R. C. Tarrant's No. 2 Getty, NW NW SE Sec. 2-34-6w.
T.D. 2,700 ft.; will skid r'g.
R. C. Tarrant's No. 4 Britton, C SW SW Sec. 12-34-6w.
Rig on location.
R. C. Tarrant's No. 6 Haglund, Jr., C SE NW Sec. 13-34-6w.
Rig on location.
R. C. Tarrant's No. 2 Larson, C W½ W½ NE Sec. 12-34-6w.
Location.
R. C. Tarrant's No. 2 McClellan, C NW SE Sec. 12-34-6w.
Drlg. 740 ft.; Colo. at 405 ft.; 10-in. at 430 ft.
Texas Co.'s No. 1 Peterson, C SW Sec. 23-36n-5w.
M.I. rotary (first report).
Texas Co.'s No. 1 Morgan, C NE NW Sec. 33-33-5w.
T.D. 3,000 ft.; cmtd. 7-in.; M.I. spudder to complete.
Texas Co.'s No. 1 Small, C NW NE Sec. 23-25n-6w.
T.D. 305 ft.; W.O.C. 10¾-in.
Texas Co.'s No. 1 Section 9 Unit, C NW SE Sec. 9-32n-6w.
M.I. rotary (first report).
Texas Co.'s No. 1 Tweedy, C N½ NE Sec. 21-35n-6w.
Drlg. 470 ft.

**Liberty County**

John Wilde's No. 2-A Mahoney, W SE SW Sec. 22-27-4e.
Drlg. 1,543 ft.; S.O. in Bow Island sand.

**Petroleum County**

Hardendorf & Keyes' No. 1 Asted, SW NW SE Sec. 22-13n-28e.
Spudded and S.D.

**Phillips County**

Little Rocky Dev. Co.'s No. 1, SE SE SE Sec. 17-24-24.
S.D. to finance at 352 ft.

**Pondera County**

Norden Corp., Ltd.'s No. 1 Hollan, NW NW NW Sec. 12-28n-6w.
S.D. at 500 ft. to complete leasing.
Texas Co.'s No. 1 Unit 5, C SW SW Sec. 3-30-5w.
Drlg. 2,305 ft.

## Rosebud County

The Birney Oil & Gas Co.'s No. 1, SW cor. Section 7-6s-43, Birney district, which spudded late in 1933, was abandoned recently at 400 feet.

**Stillwater County**

Continental Oil Co.'s No. 1 Parker, 500 ft. N of S line and 660 ft. E of W line, SE Sec. 25-5s-17e.
Cellar and pits.
Continental Oil Co.'s No. 1 Orr, SW NW SE Sec. 18-5s-17e.
Drlg. 3,284 ft. in red beds.

## Toole County

The only completion in the Kevin-Sunburst Field was the Imperial Oil Co.'s No. 16 Craig, C NW NE Section 19-35-1w, which pumped 15 bbls. a day initial after acidizing. Total depth is 1,615 feet and the Ellis-Madison contact was at 1,596-1,615 feet. There was one new location.

A. Beardsley's No. 4 Swears, SE SE NW Sec. 9-35-2w.
Drlg. 1,425 ft.; 6⅝-in. at 1,400 ft.; Sunburst dry at 1,410-25 ft.
Cassidy and Cassidy's No. 1 Veitch, 220 ft. W of E line, 660 ft. N of S line, Sec. 31-35n-2w.
Drlg. 190 ft. (first report).
Coolidge & Coolidge's No. 2 Government, SW NE SE Sec. 35-36-2w.
Spudding.
A. C. Crumley's No. 6 Shaw, SW NW SE Sec. 35-26-2w.
Drlg. 1,300 ft.
Crumley & Son's No. 4 Fryberger, NW SE SE Sec. 24-35-3w.
Drlg. 625 ft. (loc. cor.).
P. L. Eddy's No. 5 Seabrook, NE SW SW Sec. 19-35-2w.
M.I.M.
Fraser & Kluth's No. 1 Severance, C SE N ½ Sec. 29-32-2e.
Resuming at 1,520 ft. (cor.).
T. P. Kyle's No. 1 Clark, SW SW SE Sec. 19-37n-1e.
Drlg. 1,320 ft.
Monopeg Oil, Ltd.'s No. 3 Dipple, S SW NW Sec. 28-35-1w.
S.D. 1,355 ft.; rigging new machine.
Mon-Tex Pet. Co.'s No. 1 fee, NW SW Sec. 27-34-1w.
Drlg. 1,450 ft.; Sunburst dry at 1,360-70 ft.
New Era Fuel Co.'s No. 1 Halter, E NW NE Sec. 21-35n-2w.
T.D. 1,292 ft.; 300 ft. of oil in Sunburst at 1,275-92 ft.; 6⅝-in. at 1,280 ft. (formerly L. P. Jackson's No. 1 Halter).
E. O. Reickhoff's No. 2 Government, SW SW NE Sec. 3-35-3w.
Drlg. 250 ft.
Pfabe & Engleking's No. 8 Seabrook, SE SW SE Sec. 19-35-2w.
Small well at 1,519-29 ft.; will acidize.
C. Leonard Smith's No. 1 Eckhoff, C SE Sec. 6-33n-2e.
S.D. 575 ft. for new boiler.
C. Leonard Smith's No. 1 Federal Land Bank, C NE SE Sec. 11-33n-1e.
Spudding at 175 ft.
C. Leonard Smith's No. 1 I. Halverson, C NE SE Sec. 18-33n-2e.
Drlg. 1,000 ft.; showing 1,000,000 ft. gas.
C. Leonard Smith's No. 1 H. Halverson, NW NE Sec. 18-33n-2e.
Rigging up rotary at 250 ft.
Texas Co.'s No. 10 Bruins, C S½ SW Sec. 10-35n-2w.
Drlg. 1,270 ft.

## UTAH

Mountain Fuel Supply Co.'s No. 2 Murphy, NE NE Sec. 21-3n-24w.
T.D. 6,790 ft.; P.B. to 5,750 ft. to complete as gas well in the Dakotas.

**Grand County**

Columbian Crude Co.'s No. 1 Balsey, SW SE Sec. 12-25n-20e.
Rigged and ready to spud (first report).

**Summit County**

Longwell Pet. Co.'s No. 1, SE SW SE Sec. 35-3n-5e.
Resuming at 850 ft.; trying to U.R. 10-in. to bottom to shut off wtr.

**Utah County**

Diamond Oil Co.'s No. 4 Government, CSL SE NW Sec. 16-8s-5e.
Drlg. 2,735 ft.; showing considerable gas.

**Washington County**

Arrowhead Pet. Co.'s No. 2 Escalante, NW NW NE Sec. 19-43-15.
T.D. 4,114 ft.; P.B. to 3,250 ft.; shot and C.O.
Arrowhead Pet. Co.'s No. 1-A, SE SW NE Sec. 1-43-15.
Drlg. 1,400 ft.

HAZARDS OF THIN CASING CAN BE AVOIDED

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# Among Gulf Coast Drilling Contractors

George W. McMurry Drilling Co., San Antonio, has three rigs running at this time, one for Sun Oil Co. in the Dirks Pool in Bee County; one for itself in the same pool, in which he has set the oil string; and one for Fox & Heflin offsetting the Foley lease in the Tuleta Field, Bee County. Mr. Murry, accompanied by Mrs. McMurry, is enjoying a protracted vacation in the northwest, where at last accounts they were having a try at salmon fishing near Seattle and Vancouver.

Al Buchanan of San Antonio has 11 rigs running in Southwest Texas area, five of them being in the Plymouth Pool for the Plymouth Oil Co. The others are scattered throughout the area.

George Echols is rigging up to work over No. 2 Colby for Windsor Oil Co. in the Manvel Field, following which he will drill No. 3 Colby for the same operators. In the same field, Echols has set surface pipe for the Uscan Oil Co. At Placedo, derrick is going up for a well to be drilled for Sun Oil Co. In East Texas, Echols is completing a well for Houston Oil Co.

Alamo Drilling Co. is drilling in hard formation with rock bit below 4,500 feet on a well for Turnbull & Irwin, Shell Petroleum Corp. and itself.

Edwards Drilling Co. is drilling below 4,200 feet on a well for the Jefferson Lake Oil Co. near Abbeyville, La., is drilling below 5,000 feet on a well for Pure Oil Co. at Dickinson, Galveston County, and is coring a well for Moretex Oil Co. in the Placedo Field.

Smith & McDannald are drilling below 5,400 feet on a wildcat test for Shell Petroleum Corp. near Louise Field; are drilling below 3,600 feet on a well for Pure Oil Co. in the Louise Field; are starting up on No. 2 for Stanolind Oil & Gas Co. at Hastings, Brazoria County; have set 2,200 feet of surface pipe in a well for Tide Water-Texas Seaboard Oil companies at Long Lake; have set oil string for the same operators in No. 11 Wills in the Cayuga Field; have one rig shut down at Roanoke, La.; and have four rigs nearing completion of wells for Superior Oil Producing Co. at Bosco, La.

Anderson, Kerr & DeArman, having cleaned all but one joint of drill pipe from their well at Pierce Junction, have sidetracked and are within 40 feet of the pay. Same contractors are preparing to start a test on the Cockburn block on the Houston ship channel, to be drilled for H. C. Cockburn-Continental Oil Co. and contractors.

Rutherford Drilling Co. has one rig running for Phillips Petroleum Co. in the Vanderbilt Field, and one rig running for Skelly Oil Co. at Van Vleck.

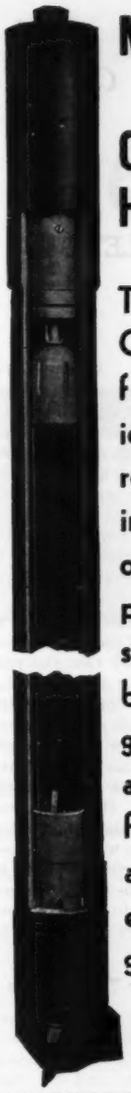
San Patricio Drilling Co. is drilling a well for Skelly Oil Co. in the Cayuga Field.

Cron & Gracey have one rig running for Shell Petroleum Corp. at Whitecastle; one for the same company at Roanoke; one for the same company at Iowa; one at Blue Ridge and one at Barbers Hill for Sinclair Prairie Oil Co.; one at Manvel for Texas Co.; two at South Houston for Stanolind Oil & Gas Co.; one at Placedo for Barnsdall Oil Co., and one at Eunice, N. M., for Repollo Oil Co.

Rowan Drilling Co. has completed a dry hole for Amerada Petroleum Corp. at Rattlesnake Mound, depth being 5,700 feet. No. 2 Metzger was completed at Tomball for the same operators as a good producer. Two wells have just been completed for Stanolind Oil & Gas Co. in the Cayuga Field, Nos. 1 and 2 Barton.

W. V. (Bill) Bowles is drilling a well for Texas Co. in the Manvel Field, Brazoria County.

Here's one of Al Buchanan's drilling crews, on location somewhere east of Loma Alta, Duval County, that can be found only by the help of detailed maps, a compass, native scouts and a lot of luck. They are digging No. 1 Yates, a wildcat, for Stanolind Oil & Gas Co. Reading, left to right, they are: H. C. Tice, G. M. Trafton, E. E. Dunlap (driller), and Marvin Mills.



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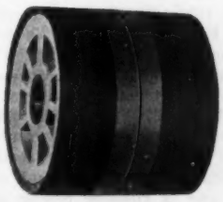

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*Texas and Louisiana Gulf*

# DEEP TEST IN ACADIA PARISH MAY PROVE TO BE OIL WELL

By F. L. SINGLETON

HOUSTON, Tex., Aug. 5.—The first production test made on the deep wildcat well of Continental Oil Co., No. 1 Ortego, in Acadia Parish, Louisiana, resulted in a large gas well and it is being killed preparatory to testing, after another screen setting has been made. It is believed the screen was set too high in the gas sand and that the well will be completed for an oil well after the next production test.

It is bottomed in the Frio sand at 8,308 feet and after 7-inch casing had been cemented at 8,297 feet and plug drilled, the following screen setting was made: 15 feet of 5-inch .008 gauge screen on bottom of 10 feet and 3 inches of blank liner sealed in the casing with a 7-foot packer. Two and a half inch tubing was swung on top of the packer and the well was washed for one hour and a half when it began to flow wash water and then dry gas. After it started cleaning itself it began to choke up and began to show signs of oil in the gas flow. The working pressure registered 2,970 pounds.

### Electrical Coring Tests Made

The production test was made after three electrical coring tests had been made. On the third survey it showed 135 millivolts porosity and 40 ohms resistance from 8,299-8,308 feet, and from 8,299-91 feet it recorded from 130 to 60 millivolts porosity with a maximum of 50 ohms resistanee. From 8,276-91 feet it showed sand with 60 millivolts porosity and 50 to zero at 76 ohms resistance.

It is on a block of approximately 8,000 acres and is 990 feet south and 500 feet east of the NW cor. SW Section 28-7s-2w, about 15 miles north of the Jennings Field and 7 miles south of the town of Basile.

### Gillis Field

In the Gillis Field, Calcasieu Parish, Union Sulphur Co. is preparing to complete two wells. No. 5 Nickerson in Section 12, topped the oil sand at 6,754 feet and is testing at a total depth of 6,760 feet. Six and five-eighths inch casing was cemented at 6,740 feet. In the same section No. 11 State topped the sand at 6,738 feet and is running casing preparatory to testing at a total depth of 6,744 feet.

Union Sulphur Co. has made the first wildcat location on its large block of 15,000 acres in Calcasieu Parish reported last week. It is No. 1 Prairie Land & Canal Co., 1,312 feet south and 610 feet west of the NE cor. Section 1-11s-9w. This is one of the largest blocks recently recorded in this district.

### Roanoke

At Roanoke, Jefferson Davis Parish, the two 10,000-foot tests being drilled by Humble Oil & Refining Co. and Shell Petroleum Corp. are coring, with no shows of oil or gas reported. No. 1 Jarnigan being drilled by Shell Petroleum Corp. is coring in sandy shale below 10,281 feet and Humble Oil & Refining Co.'s No. 1 Nelson Thomas is coring in sand and shale below 10,267 feet.

Three deep producers were completed in the Bosco Field, Acadia and St. Landry Parishes, all by Superior Oil Producing Co. In Section 34, No. 8 Hernandez made 216 bbls. in 10 hours through a sixteen-sixty-fourths inch choke with tubing pressure 400 pounds and casing pressure 950 pounds. On the extreme southwest side of the field, No. 3 Kahn in Section 33, made 192 bbls. in 24 hours from a total depth of 8,695 feet. Due north in the same section No. 3 LeBlanc was completed at 8,664 feet but no gauge reported. Seven-inch casing was cemented at 8,647 feet.

### Van Vleck

In the Van Vleck Field, Matagorda County, Skelly Oil Co. announced location for its fourth test, No. 1 Turner, 523 feet east from the southwest corner of the F. Metzler 135.46-acre tract, thence 466 feet south at right angles in Maria Cummins Survey.

### Old Ocean

Along the Texas Coast, in the Old Ocean district, southwestern Brazoria County, Harrison and Abercrombie are preparing to complete No. 2 Bernard River after recovering 2,200 feet of stuck drill stem. It is bottomed in sand at 8,661 feet and the operators are reaming to the bottom preparatory to running 7-inch casing. It topped the Discorbis at 6,685 feet, Frio at 8,449-76 feet and the oil sand at 8,648 feet. Based on the top of the Frio it is about normal with the discovery, approximately 1,400 feet southeast. Location in in the Charles Breen Survey.

### Montgomery County

Three wildcat tests in Montgomery County were marked off the list as dry holes the past week. In the Splendora area, eastern part of the county, Paul Sanderson, trustee's No. 1 Texas Long Leaf Lumber Co. in the Walker County School Land Survey was abandoned in sandy lime at 6,452 feet after coring salt water in the Cockfield sand that was topped at 5,730 feet. Northeast of Magnolia in the western part of the county, B. E. Boylard's No. 1 Atkinson in the Robert George Survey, was drilled to 5,150 feet in salt water sand and was abandined after it was plugged back to 3,248 feet and tested salt water with a small showing of gas in 15 minutes from 3,167-3,248 feet. The Cockfield was topped at 4,958 feet.

In the Willis area, northern part of the county, T. T. Word, trustee's No. 1 Delta Land & Timber Co., topped the Cockfield at 3,603 feet and cored salt water sand from 3,625-52 feet and will probably be abandoned at its present depth of 3,661 feet.

### Liberty County

A small amount of salt water made its appearance in the discovery well of J. W. Frazier and others' No. 2 Lynott and Buffum, the discovery well of a new field in central Liberty County opened last week. While the well was flowing through a one-quarter inch choke with the tubing pressure 700 pounds and the casing pressure 1,210 pounds, a shake out test showed 12 per cent mud and b.s. After the mud had been treated it showed 6 per cent salt water. On a one-eighth inch choke, with the tubing pressure 750 pounds and shut in casing pressure 1,465 pounds, another test showed .2 of 1 per cent salt water. The salt water is believed to be coming from the bottom of the old hole.

### Jasper County

Five miles southeast of Jasper in Jasper County, much attention is being given the Marathon Oil Co.'s wildcat test, No. 1 Jasper County Lumber Co., which is coring below the Cockfield sand at 3,620 feet. The top of the Cockfield was topped at 3,250 feet. A sand showing salt water was cored around 3,400 feet. Location is in the T. C. Holmes Survey.

### Brazoria County

On the Rattlesnake Mound prospect, Brazoria County, Amerada Petroleum Corp. abandoned No. 2 Houston Farm Development Co. at a total depth of 5,700 feet. It is in the Perry and Austin Survey in the southeastern part of the county.

### Conroe Deep Test

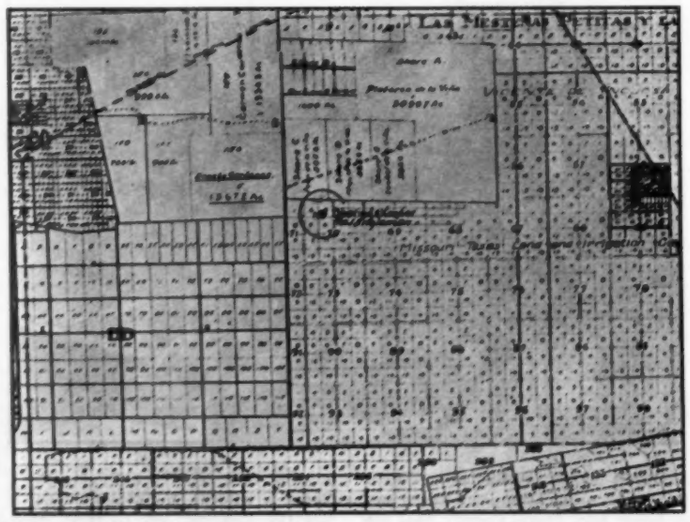
Alpha Petroleum Co. is reported to have made location for an 8,000-foot test in the Conroe Field, Montgomery County. The test is being drilled in attempt to test several sands below the Cockfield section. It is to be on the Hensley tract in the A. Steele Survey in south central part of field.

### Anahuac

Humble Oil & Refining Co. is preparing to test its No. 4 Middleton in the Anahuac Field, Chambers County. It is bottomed in oil sand at 7,090 feet and 7-inch casing was cemented at 7,048 feet. It is in section 58, H.&T.C. Survey, and makes a small north extension to the field.

### Dickinson

At the Dickinson Field, Galveston County, Humble Oil & Refining Co.'s No. 1 Hancom in the J. S. Sherman Survey, was completed for an initial production of 6 bbls. per hour through a three-eighths inch choke with tubing pressure 150 pounds and casing 700 pounds. It topped the Discorbis at 6,303 feet, Heterostegina at 6,936 feet and the Marginulina at 8,020 feet. It is producing from sand topped at 8,020 feet and bottomed at 8,045 feet. Offsetting the company's No. 1 Danielson, producing from a deep sand at 9,140 feet, its No. 2-A Maco Stewart was tested the third time at a plugged back depth of 8,510 feet and was completed flowing 5 bbls. per hour on a one-quarter inch choke with tubing pressure 2,800 pounds and casing pressure 2,850 pounds. It is making 10 per cent salt water and will probably be worked over.



A part of old Ocean district, Brazoria County, showing location of Harrison and Abercrombie's No. 2 Bernard River

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An array of Dean cores laid out for inspection. Practically all taken by the Dean Core Drill from the Pure Oil Co.'s giant gasser, the No. 1 Chowchilla Well (8,402 Ft.) at Merced, California, under the direct supervision of Mr. H. C. O. Clarke, General Superintendent of California Operations.

Geologist Arthur E. Remington and assistants examining cores taken from the Chowchilla Well by the Dean Core Drill.

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# DEAN CORE DRILLS

# Eastern Field Report

By STAFF CORRESPONDENT

# NEW TEST IN ORISKANY SAND FOR CRAWFORD COUNTY, PA.

PITTSBURGH, Pa., Aug. 5.—An important new test which is scheduled for the Oriskany horizon will start drilling within a few days in western Pennsylvania. In south Shenango Township, Crawford County, Carnegie Natural Gas Co. is hauling in material for a test on the Gertrude Scott farm. On the Linesville quadrangle, the location is about three-eighths of a mile west 12 degrees north of Center School, or five-eighths of a mile east 30 degrees north of Bench Mark 1,248. The Oriskany sand at this location is about 2,000 feet below sea level.

There were 15 completions and 5 dry holes in the lower Eastern fields during the week. Six were was wells and nine were producers with an initial production of 103 bbls. Most new production is in Southeast Ohio.

## SOUTHEAST OHIO

A fair test was completed in Coshocton County where Pure Oil Co. drilled a test on the Thomas J. Clark farm in New Castle Township through the Clinton sand. It produced 19 bbls. the first day after shot. The sand was shot with the umbrella method which consists of packing 15 feet of gravel on the top of the shot forcing the explosion laterally. The second day, the well produced 45 bbls.

In Knox County, Robert Bright and others completed No. 4 on the V. McKee farm in Section 23, Harrison Township, in the Berea sand at a depth of 730 feet. It produced 2 bbls. the first day after shot. In the NW Section 11, Union Township, Knox County, Upham Gas Co. completed a test on the Clement Durbin farm in the Clinton sand at a depth of 2,850 feet. It is a gas well rated at 500,000 feet a day.

In Licking County, McClay Brothers completed a test on the Howard E. Priest farm in the SE of Section 17, Fallsbury Township, in the Clinton sand at a depth of 3,048 feet. It produced 50 bbls. the first day after shot.

In Medina County, Tract 15, Lot 12, Chatham Township, E. R. Edson & Son Co. completed No. 62 on the Edward G. Miller farm in the Berea grit at a depth of 505 feet. It made 5 bbls. the first day after shot.

In Muskingum County, Mid East Gas Co. completed a test on the Harvey Dutro farm in the NE of Section 18, Harrison Township, in the Medina sand below the Clinton at a depth of 4,379 feet. It is showing for 10 bbls. a day.

In Noble County, Roman L. Smithberger completed a test on the Joseph H. Noll farm in the southern half of Section 15, Elk Township, in the Germantown sand at a depth of 1,098 feet. It is a small gas well with no showing of oil.

In Perry County, Kachelmacher estate completed No. 9 on the Hemlock Coal Co. lease in the SE of Section 25, Coal Township. It is a gas well gauging 250,000 feet a day from the Clinton sand at 3,550 feet. In Pleasant Township, the NE cor. SW of Section 33, Allegheny Oil Co. drilled No. 21 on the James McDonald farm through the Berea sand and to a depth of 1,070 feet. It was dry.

In Washington County, Paufer Oil Co. completed No. 3 on the Washington County farm, east of Marietta, in Section 11, Marietta Township, in the Mitchell sand at a depth of 545 feet. It will make an 8-bbl. pumper after shot.

## SOUTHWEST PENNSYLVANIA

There was only one completion in Southwest Pennsylvania during the week. In Allegheny County in the borough of Glasport, Lincoln Township, Beedle and others completed a test on the Childs farm at a total depth of 3,667 feet. It is a gas well gauging about 82,000 feet a day. The Pittsburgh Coal was at 190-196 feet; Big Injun at 1,430-1,741 feet; Murraysville sand at 2,100-90 feet; Gordon stray sand at 2,400-13 feet; Gordon sand at 2,417-34 feet; Fourth sand at 2,495-2,505 feet; the Fifth sand at 2,561-88 feet; Elizabeth sand at 2,740-65 feet; Speechley at 3,501-15 feet; with gas showing at 3,503 feet; the Tiona at 3,567-3,667 feet.

In Amwell Township, Washington County, Manufacturers Light & Heat Co. has reached 2,400 feet in No. 2 on the R. A. Rankin farm. On the C. and S. L. Hazlette farm, this company is drilling at 2,100 feet. Carnegie Natural Gas Co. is down 2,555 feet on the T. N. Shrontz farm. The Gantz sand was at 2,517-44 feet. Its test on the R. M. Carrons farm is shut down at 2,782 feet testing the 5⅛-inch casing. The same company has the rig completed for another test on the C. W. Dunn farm.

In south Franklin Township, Furman Nuss & Co. are building a rig on the James Pipes farm. Offsetting this across the line, Carnegie Natural Gas Co. has made a location in the northwest corner of the John A. Dodd farm of 11 acres.

In Cecil Township, Washington County, Steele Morris & Co. are down 2,250 feet on the J. A. Augerer farm. In Peters Township, Lindsay & Co. have reached 1,750 feet on the S. L. Van Eman farm.

In west Bethlehem Township, Washington County, H. D. Freeland and others are drilling at 415 feet on the Winfield McCarty farm northeast of Marianna.

In Greene County, Carnegie Natural Gas Co. is building a rig on the Hunt farm in Morris Township, about a mile northeast of the Wright Ealy test. In Center Township, this company is down 1,500 feet on the J. H. Orndoff farm. In Jefferson Township, Peoples Natural Gas Co. has reached 2,093 feet drilling deeper No. 1 on the William King farm.

In Richhill Township, H. E. Milliken and others are drilling deeper No. 1 on the Charlotte Smith farm. Starting at 2,167 feet, the present depth is now 3,010 feet. There was additional gas at 2,287 feet; the Fifty Foot sand was at 2,900 feet with gas showing at 2,900-03 feet; Gordon stray sand was at 2,980 feet with gas showing at 2,983-85 feet. Gas volumes were too small to test.

In this township, Lewis & Co. are again skidding the rig to start a new test on the Samuel Chess farm. Here, Wasmuth and Callahan are fishing for bailer at 1,200 feet on the Daniel Goodwin farm.

In Dunkard Township, Greene County, Ira Donley is spudding on his own property, on Dunkard Creek, 3 miles northeast of Mount Morris and a half mile west of Bald Hill.

In south Union Township, Fayette County, William Snee and others are ready with a new cable to resume fishing on the Summit Hotel property on Chestnut Ridge. The tools are in the hole at 3,962 feet.

## WEST VIRGINIA

There were three producers completed in West Virginia during the week. In Kanawha County, Virginian Gasoline & Oil Corp. completed No. 18 on the Chloe J. Copenhaver farm in Elk district, in the Squaw sand, making 10 bbls. a day. It is 1,000 feet northwest of No. 9.

In Roane County, Kenny M. Hunt and others drilled No. 3 on the Zora Blaker farm on Peniel Run in Curtis district, deeper in the Salt sand. Formerly it was a gas well, now showing for about 4 bbls. a day.

In Wood County, B. L. Burge completed a test on the O. J. Varner farm in Williams district, in the First Cow Run sand. It is producing 2 bbls. a day. In Walker district, Schroeder Brothers drilled No. 5 on the J. R. McCracken farm through the Berea sand; it was dry.

The test of Smith and Trainer on the I. Martin McDougal farm in Union district, 2½ miles east of Harrisville in the northern edge of the Goose Creek Pool, is making 80 bbls. a day with a high in one day of 200 bbls. The location is on the South Fork of Hughes River.

### Gas Wells

In Boone County, Owens Illinois Glass Co. completed No. 21 on the Cassingham Coal Land Co. lease in Scott district, at a total depth of 2,067 feet with about 306,000 feet a day. The Big lime was at 1,313-1,530 feet; the Big Injun at 1,530-66 feet; the Berea sand at 2,006-34 feet with gas showing at 2,006-21 feet.

In Ritchie County, George F. Egan completed a test on the Mary and B. F. Welch farm on Indian Creek in Union district in the Injun sand and it is a gas well gauging about 250,000 feet a day. In this district, W. A. Bickerstaff completed a test on the Lakin Prichard farm through the Big Injun sand at a total depth of 1,914 feet. It was dry after shot.

In Roane County, Orchard Run Oil & Gas Co. drilled a test on the Anna Brannon farm in Smithfield district through the Big Injun sand to a total depth of 2,075 feet. It is dry and being abandoned.

In Wirt County, W. C. Patterson drilled No. 22 on the J. and S. Swisher farm in Clay district through the Injun sand and it is a dry hole.

### Deep Tests

In Jefferson district, Kanawha County, the deep test of Benedum & Trees on the Joseph Hill farm, has been shut down at 5,620 feet for a wire cable. At this depth the hole filled up with about 100 feet of 41 gravity dark green oil from a lime formation. The new cable has been installed and drilling resumed and it is expected to soon reach the Newburg.

In Elk district, Kanawha County, Yoak Oil & Gas Co. is down 4,747 feet on the W. T. and J. H. Goshorn farm and is drilling the Onandaga lime. Columbian Carbon Co. is down 4,259 feet in the deep test on the G. and D. Copenhaver farm. Benedum and Trees remain shut down at 4,703 feet on the Mary C. Wingfield farm.

In Malden district, Godfrey L. Cabot, Inc., has reached 4,670 feet in No. 7 on the Campbells Creek Coal Co. lease and 3,875 feet on the Plus R. Levi farm. Columbian Carbon Co. is down 3,500 feet in No. 14 on the W. D. Lewis farm and the hole is caving.

In Loudin district, the same company has reached 1,716 feet on the Kanawha City Co. lease. Godfrey L. Cabot, Inc., is drilling at 3,010 feet on the Kanawha Land Co. and is building a road to location on the A. F. Vorholt.

### Other Drilling

In Boone County, Pure Oil Co. is grading a road to a location for No. 9 on the Robson and Prichard lease in Sherman district. This company has part material on the ground for No. 76 on the Federal Coal Co. lease and is drilling No. 74 at 2,520 feet and No. 75 at 1,019 feet. In Washington district, Pond Fork Oil & Gas Co. is down 1,900 feet on the Cole and Crane lease. Owens Illinois Glass Co. is drilling at 513 feet on the No. 13 Little Coal Land Co., and 798 feet on the No. 2 Letha Meyers. In Scott district, this company is down 1,688 feet in the No. 3 S. M.

Wheeler heirs, and 1,129 feet on the No. 1 V. G. Vandelinde.

In Cabell County drilling is more active. In Guyandotte district, R. J. Petry and others are drilling at 2,100 feet on the Virginia Powell test. In McComas district, Martin and Swanson are down 500 feet on the Henry Childers test. W. C. Kingery and others have reached 1,300 feet in the Pratt heirs test. R. H. Adkins, trustee, is drilling at 1,400 feet on the J. M. Fellure farm. West Virginia Gas Co. is running casing at 1,600 feet on the George W. Savage test. Toms Creek Gas Co. is down 700 feet on the C. W. Meelingh farm and H. H. Adkins and others a like depth on the H. S. Fraley No. 4. Empire State Gas Co. has a location on the Fay Savage farm.

In Calhoun County, Godfrey L. Cabot, Inc., has started drilling deeper No. 1 on the O. C. McCartney farm in Sherman district. Here Starcher & Richards have completed the rig on the Albert Kight 26-acre tract. In Center district, Zeke Ferrell has the material on the G. L. Cabot farm. A. H. Jackson is down 1,110 feet on the E. R. Fluharty test. In Washington district, Hasset and Jarvis are drilling on the Hoke Jarvis farm. In Lee district Mudlick Oil & Gas Co. is down 1,900 feet in the G. W. Bennington No. 3.

In Gilmer County, Hope Construction & Refining Co. is down 1,914 feet on the K. C. Simmons farm in Center district. Starcher & Richards are fishing for tools at 1,150 feet on the R. Paul Ritchea farm. In DeKalb district, J. W. Cunningham and others are shut down testing at 1,640 feet on the Lee and Ola Gainer farm.

In Lincoln County, United Fuel Gas Co. is drilling at 1,920 feet on the Vincent Dailey farm in Carroll district. In Sheridan district, H. A. Waggoner, trustee, is drilling at 1,700 feet on the Nettie May farm. In Logan County, Southeastern Gas Co. has reached 850 feet on the G. W. Mitchell farm in Logan district.

In Monongalia County, Carnegie Natural Gas Co. has two wells drilling, both in Cass district. The test on the Catherine Cooke farm has reached 2,305 feet and that on the C. H. Brand farm 1,040 feet.

In Ritchie County, H. J. Scott and others are drilling on the J. P. Strickler heirs farm on Whiskey Run in Clay district. In this district, C. W. Athey and others are drilling a second test on the F. R. and Roxie Ball farm about 400 feet north of No. 1. Lucas and Mahaney are down 1,300 feet on the Blair Martin farm. In Grant district on the waters of Devil Hole, W. R. Pierson and others have a rig on the Rutherford heirs farm. Bergy and others have a location on the R. W. Richards farm.

In Roane County, Guy Boggess and others have a location on the P. A. Bays and others farm in Smithfield district. Big Four Drilling Co. is down 550 feet on the Mary E. Hershberger farm. In Curtis district, K. M. Hunt and others have a location on the A. C. Eagle farm. Henderson Oil Co. is down 125 feet starting No. 2 on the E. S. Ball farm.

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A. V. Bourque, secretary of the Western Petroleum Refiners Association, Tulsa, was in New York City last week to attend meetings held in connection with the proposed voluntary code for the marketing branch of the petroleum industry.

# *Central West*

# Lima Shows More Activity and Field May Be Extended

By GEORGE A. WHITNEY

FINDLAY, Ohio, Aug. 5.—The Lima Field shows more activity than for a long period in wells drilling and the indications are the field will be extended. Many old producing wells are being abandoned and the material of the old wells will be used to drill additional wells on holdings where there is room for new wells. In Allen County, C. A. and F. J. Peavey's No. 3 on the Mary E. Steele farm, Section 24, Bath Township, produced an initial of 15 bbls., and they are drilling No. 4 on the same farm. Carman Oil Co. is drilling No. 3 on the T. J. Hadsell farm, Section 13, same township. In Perry Township, Ohio Oil Co.'s No. 8 on the George W. Tabler farm, Section 9, is drilling. H. F. Kelley & Co. is drilling No. 1 Martin Brothers farm, Section 20, and the same concern has abandoned No. 1 on the F. P. Sellers farm and No. 1 on the Mary M. Mosier farm, Section 25, Shawnee Township. In Jackson Township, W. E. Ladd is drilling No. 1 on the J. A. Clark farm, Section 6, and W. O. Hawk abandoned No. 1 on the W. H. and John Hedges farm, Section 17, same township.

In Ottawa County, Peninsula Oil Co. abandoned a test on the J. P. Cagney farm, in Section 8, Catawba Township, and is now drilling No. 1 on the James Ellithorp farm, Section 25, same township.

In Hardin County, Kenton Oil & Gas Co. is drilling No. 1 on the Frank Hamilton farm, Section 17, Pleasants Township.

In Summitt County, East Ohio Gas Co. drilled in No. 3 on the William Ritter farm, Section 18, Green Township, which was a fairly good gas producer at a total depth of 3,509 feet.

In the Tiffin Field, in Seneca County, McKinney Brothers struck a gas well on the Curtis Edwards farm, Section 24, Liberty Township, at 470 feet, and M. E. Kiser struck a gas well on the L. E. Koeper farm, same section. R. E. Greene is drilling No. 3 on the T. C. and B. G. Schaull farm, Section 30, same township. In Hopewell Township, T. R. Phillips & Co. drilled a dry hole on the James D. Watson farm, Section 1, at a total depth of 1,562 feet.

In Van Wert County, J. O. Yahn's No. 9 on the Anna C. Downs farm, Section 27, Liberty Township, produced 10 bbls. initial. H. C. Miller is drilling on the James P. Davis farm, Section 5, Jennings Township.

In Sandusky County, F. F. O'Brien & Co. is drilling No. 1 on the Albert Coleman farm, Section 15, Jackson Township. H. Farley is drilling below 1,265 feet in the H. Flora farm, Section 35, Scott Township. Montgomery & Co. are drilling below 2,670 feet in No. 2 on the Hetrick farm, in Rice Township.

In Wyandot County, Murphy & Co. are drilling below 1,200 feet in No. 3 on the Mary Chaney farm, Section 8, Tymochtee Township.

In Richland County, J. B. Reed is drilling below 100 feet in No. 2 on the Ken McConkie farm, in Jefferson Township.

In Coshocton County, Preston Oil Co.'s No. 4 on the C. B. Mossholder farm, in Newcastle Township, had an initial of 43 bbls. at 3,226 feet. Same company made a location for No. 2 on the Grace Canont farm, Section 26, Perry Township. Murphy & Son's No. 3 on the John S. Rine farm, Section 27, Perry Township, had an initial of 60 bbls. at 3,157 feet. Pure Oil Co.'s No. 1 on the Thomas Clark farm, Section 30, Newcastle Township, showed 3 bbls. at 3,227 feet.

In Perry Township, Ohio Fuel Gas Co.'s No. 1 on the H. H. Tripp farm, Section 14, Reading Township, is a gas well at a total depth of 2,564 feet. Same company is drilling below 100 feet in No. 1 on the H. and H. Ridenour farm, Section 7, same township. Wehrle Brothers are drilling below 350 feet in No. 1 on the David M. Helser farm, Section 36, Thorn Township. In Reading Township, Ohio Fuel Gas Co. is drilling No. 1 on the Irene and William Stoner farm, Section 5. Perry Sturm has a rig for No. 2 on the E. Vansickle farm, Section 5, same township.

In Stark County, Obermiller and others have a rig for No. 1 on the C. and H. Rose farm, Section 5, Plain Township. H. and E. Fawcett have a rig on the fee land, Section 21, same township. Robason & Arn is drilling No. 1 on the H. G. Mellinger farm, Section 9. Brendel Producing Co. is drilling No. 1 on the Anna R. Snyder farm, Section 4, same township. East Ohio Gas Co. is drilling No. 2 on the Charles and Stella Shouse farm, Section 18. Same company is shut down at 300 feet in No. 4 on the Howard Fawcett farm, Section 17, same township; is shut down at 4,050 feet in No. 1 on the J. and L. Deetz farm, Section 21, same township, and is drilling No. 2 on the D. and M. Brausher farm, Section 10, same township. In Perry Township, White & Co. is drilling below 2,975 feet on the Jacob Isler farm, Section 25. In Osnaburg Township, Dewalt & London are fishing at a depth of 375 feet on the Charles C. Welrough farm, Section 7.

In Gallia County, Penn-Ohio Gas Co. is drilling No. 1 on the Cyrus Swisher farm, Section 25, Addison Township. Bowers and others are drilling No. 1 on the Ella M. Donally farm, Section 34, same township. H. E. Hamilton is drilling No. 1 on the Ella S. Jones farm, Section 31, same township, and Ohio Fuel Gas Co. is drilling No. 1 on the S. R. Bing farm, Section 22, same township.

In Lawrence County, Shale Development Co. has a rig on the W. P. Booth farm, Section 21, Union Township.

In Cuyahoga County, Ohio Fuel Gas Co. is drilling No. 1 on the Ralph W. Frank farm, Lot 37, Strongville Township, and J. W. Cushing is drilling No. 1 on the Aluminum Co.'s property, Lot 291, Newburg Township.

In Ashland County, McConnell & Co. is drilling No. 4 on the A. J. McClure farm, Section 10, Lake Township. Hulse & Kundtz are drilling No. 1 on the Clarence Frankfelder farm, Section 16, Montgomery Township.

## ILLINOIS

In the Illinois Field no completions were reported. In Clark County, Gilford & Morrow are drilling No. 2 on the W. B. Johnson farm, Section 36, Casey Township. In Parker Township, C. Hartman is drilling No. 1 on the J. T. Baughman farm, Section 20. F. E. Stohr and others are drilling No. 14 on the James Turner farm, Section 33, same township, and Edward R. Phillips is drilling No. 27 on the J. S. Phillips farm, Section 18, same township. In Crawford County, Price & Weger is drilling No. 1 on the H. Standfield farm, Section 36, Prairie Township, and Frank Ellison is drilling No. 1 on the E. R. McClain farm, Section 2, same township. In LaMott Township, Slavage Oil Co. is drilling No. 1 on the John Patton farm, and Karns & Co. is drilling No. 1 on the Orland Walker farm, same township.

In Jasper County, Richard Eke & Co. is drilling No. 1 on the H. Klair farm, Section 7, Waid Township.

## KENTUCKY

In Ohio County, Kentucky, Cumberland Petroleum Co.'s No. 13 on the David Brooks farm, produced an initial of 40 bbls., and No. 14, same farm, produced 60 bbls. Petroleum Co.'s No. 7 on the Bellamy heirs farm, produced an initial of 50 bbls., and B. E. Calvert & Co.'s No. 5 J. Ed. Smith farm, south of Fordsville. Kentucky Natural Gas Co.'s No. 10 on the Nannie Rodgers & Co.'s farm, near Deanfield, produced 20 bbls. Stewart & Gealy's No. 14 on the J. H. Roberts farm, in the Oak Pool, produced 20 bbls. initial. Petroleum Co.'s No. 2 on the Canary farm, south of Fordsville, was dry, and S. M. Sirman's No. 1 on the Sam Humble farm, near Fordsville. Stewart, Gealey & Co. found a dry hole in No. 12 on the E. C. Dunn farm, and Evans & Co. found a dry hole in No. 1 on the Newton farm.

In Hancock County, F. H. Hupp and others' No. 7 on the James McFerran farm, a mile northwest of Richard, produced 50 bbls. initial. Margaretta Oil Co.'s No. 1 on the W. E. Crowe 85-acre farm, in Ohio County, produced 8 bbls.

## Abandoned Wells

A large number of old wells in the Lima and nearby fields were abandoned. In Wood County, Security Oil Corp. abandoned No. 1 C. W. Everett farm, Section 2, Montgomery Township; Nos. 9, 24 and 28 on the H. Hill farm, Section 5, same township; Nos. 3, 4 and 6 on the N. T. Fay farm; No. 10 on the J. Dieter farm, Section 22; and No. 1 on the L. Crowell farm, Section 25, same township. In Freedom Township, Wood County, Security Oil Corp. abandoned No. 34 on the Fuhr & Villwock farm, and No. 10 on the H. and J. C. Bruning farm, Section 34.

# Michigan Field Report

# NEW RECORD IN PRODUCTION ESTABLISHED FOR THE STATE

By
**PAUL A. ELLIOTT**

MUSKEGON, Mich., Aug. 5.—The Crystal Township, Montcalm County Pool, near Alma, again commanded the attention at the close of July, another record breaking month. After more than doubling the pressure production from 7,976 bbls. July 1 to 16,640 bbls. August 1, Crystal operators added two new producers, one estimated a 1,500-bbl. initial well in the Dundee and the other a small well. A reported show of oil and gas in an extension test nearly 2 miles north of Burnstein Oil & Gas Co.'s No. 1 Keel, a 250-bbl. initial producer in Section 35, Ferris Township, served to increase activity.

J. W. Leonard, Jr. and others' No. 2 Ida M. Husted, SW SW SW Section 2-10n-5w, Crystal Township, south offset to Pure Oil Co.'s No. 1 Mangus, a 5,000-bbl. initial producer, flowed about 500 bbls. during the first eight hours after drilling into the Dundee. Limestone was topped at 3,173 feet and oil at 3,189 feet. Operators planned to drill deeper in search of the pay which flowed 3,000 bbls. initial in the Daily-Tow well, a direct west offset and 3,200 bbls. initial in the McClanahan-Flint, direct south offset.

Snowden & McSweeney's No. 3 Wight heirs, SE NE NE Section 10, same township, was drilled to 3,192 feet and was tubing to pump after filling up about 500 feet with Dundee oil. Limestone was encountered at 3,172 feet and oil at 3,186 feet. It is expected to make a small producer.

Increased interest in the northwest trend resulted when a show of gas and oil through a hole full of Traverse water was reported in United Producers & Royalty Co.'s No. 1 Ernest and Martha Conner, SE SW SW Section 26-11n-5w, Ferris Township, Montcalm County, at 3,184 feet, or 4 feet in the Dundee. Limestone was struck higher than expected in this test partially drilled in before cementing casing to drill in early this week. The Conner test previously had developed about a 2,000,000-foot flow of gas in the shallow Michigan Stray sands but was drilled to test the Dundee for oil.

### Records Broken

With the aid of new developments in Crystal Pool, the pressure production of 11 areas in Michigan increased more than 10 per cent during July from 51,409 bbls. July 1 to 57,855 bbls. daily August 1. Actual production records, however, set new high daily averages, a new high week's total and a new record for monthly output on top of a record six months' period.

Total for the month was about 1,365,000 bbls. compared with June, 1935, record of 1,284,912 bbls. The daily average for July slightly exceeded 44,000 bbls. compared with 42,800 bbls. in June.

The third week of July also set a new daily average of 45,982 bbls. for a new weekly total of 321,874 bbls. The month closed with 1,066 wells producing 45,019 bbls. daily.

Pressure production ratings and estimated allowable runs August 1 follow for all Michigan fields: Porter Township, Midland County, 323 wells with a potential of 29,442 bbls. and estimated runs of 23,265 bbls. daily; Yost Pool, Midland County, 20 wells, 4,028 and 2,740 bbls. potential and runs; Greendale-Chippewa, 304 wells, 3,514 potential and runs; Vernon-Leaton, 94 wells, 2,358 bbls. potential and runs; Crystal-Montcalm, 18 wells, 16,640 bbls. potential and 8,912 bbls. runs; Home-Montcalm, five wells and 304 bbls.; Beaverton-Gladwin, two wells and 22 bbls.; Ogemaw County, 73 wells, 1,124 bbls. daily; Saginaw-Lapeer Counties, 98 wells good for 162 bbls. daily; Oceana County, 16 wells at 4 bbls. and Muskegon County, 113 wells making 257 bbls.

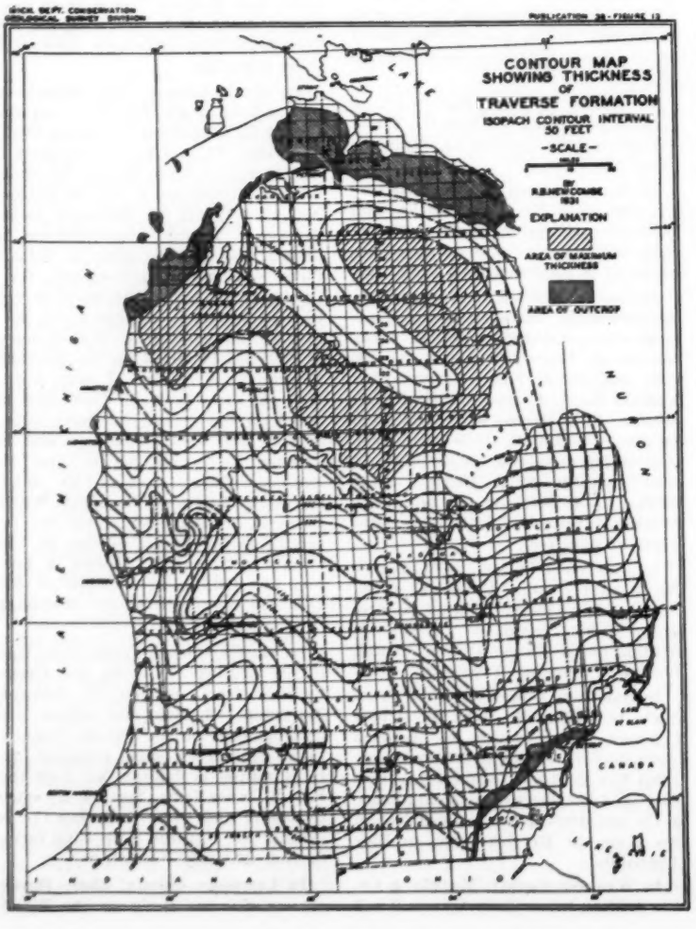
### Gratiot County

A show of gas was encountered in Bila Oil Corp.'s No. 1 Ryan, Section 32, Hamilton Township, between 800 and 900 feet. Drilling will be continued.

A new show of gas was reported in Newark Oil & Gas Syndicate's No. 1 George Beck, NE SE NE Section 29-10n-3w, Newark Township, Gratiot County, east of the Crystal Field. The Monroe was topped at 3,275 feet where casing was run and the hole was 3,440 feet deep before the show. The Beck also had a show of oil in the Traverse at 2,670 feet and in the Dundee at 3,187 feet.

### Montcalm Tests

Daily Crude Oil Co.'s No. 5 Mrs. Carey Christensen, SW NW NE Section 10-12n-6w, Home Township, Montcalm County, produced 40 bbls. during the first 12 hours in the upper Traverse. The lime was first struck at 3,030 feet and pay at about 3,094 feet, the hole being drilled to 3,103 feet as an east offset to same operator's No. 2 Hansen, a 130-bbl. Traverse producer. The new Christensen well, deepened from the Michigan Stray gas sand where it had been shut in with a potential flow of 4,000,000 feet daily, will be treated with acid.




L. G. Thompson's No. 1 J. K. Knapp, E½ half SE NE Section 17-12n-9w, Winfield Township, Montcalm County, near Amble, is still plugging back to a gas flow of about 8,000,000 feet in Michigan Stray sands after failure to strike oil in commercial quantities in the Dundee.

Gordon Oil Co.'s No. 1 Keyt, NW NW NW Section 21-12n-3w, Cato Township, is drilling after failure to strike gas in the Michigan sands.

### Mecosta County

A possible northwest extension of the Broomfield Township gas pool of Isabella County, or the discovery well of a new central Michigan gas pool, was seen in Sherrit Oil & Gas Co.'s No. 1 James H. Sheibe, C SW NE Section 13-15n-7w, Sheridan Township, Mecosta County, which struck a flow of more than 500,000 feet in the Michigan Stray sands. Five other gas tests in four Mecosta County townships are expected to drill into the Michigan Stray sands this week. They include: Hal-Be-Oyle & Gas Corp.'s No. 1 Taggart Brothers, Inc., Section 3, Austin Township; Taggart Brothers, Inc.'s No. 1 Paul Schmidt, Section 33, Colfax Township, a second extension test northwest of the proved Austin Township Pool; Guy M. Obenauer, trustee's No. 1 Behrenwald, Section 26, Hinton Township; Bryan and Martin's No. 1 William Caldwell, Section 26, Millbrook Township, and W. J. Bernier's No. 1 E. Tiffany, Section 32, also in Millbrook.

Taggart Brothers, Inc., principal developer of the Austin Township Field, has been completing one well a week for about two months by using rotary equipment to drill through the glacial drift and completing with cable tools. They plan to drill about 18 more wells in and around the Austin Pool during the next four months.

Near completion of a 30-mile extension of the Consumers Power Co.'s gas line to Midland, Bay City and Saginew taking in from the Broomfield area into the Hinton, Millbrook and Belvidere-Montcalm gas section already has resulted in a drilling program of about 25 tests in this area in addition to the Taggart plans.

Strosnider Oil & Gas Syndicate, of Mount Pleasant, has erected a rig for the first of three gas tests on 1,100 acres in Deerfield Township. The first well will be No. 1 William Hand, C SW SE Section 4-13n-9w. At least one will be drilled to the Dundee sands if unsuccessful in developing gas. Deerfield Township lies south of the Austin Township gas field, west of Hinton Township and directly north of the Winfield gas test near Amble. Joseph Strosnider, former operator in Texas, Oklahoma and Kansas, is president of the syndicate. Fred Loveday, manager of the Oil

Well Cementing & Acid Corp., of Mount Pleasant, and former geologist with the State Conservation Department, is vice president. Ralph Phillips is secretary.

### Midland County

Three new Dundee producers were completed in Midland County, two in Porter Township aggregating about 200 bbls. and one in Greendale Township, good for about 140 bbls. a day. The Carter Lease, Inc.'s No. 7 William Maywood Carter, NE SE SW Section 18-13n-1w, Porter Township, was estimated good for 150 bbls. daily after treatment for an initial flow of 45 bbls. at 3,418 feet. It flowed 120 bbls. during the first eight hours. Richard Hall's No. 4 Harris-Bond, NE NW SE Section 7, same township, is making about 50 bbls. a day after topping the Dundee at 3,398 feet and drilling to 3,444 feet. Pure Oil Co.'s No. 4 Arthur N. Ward, NE SW SE Section 7-14n-2w, Greendale Township, made 140 bbls. daily after treatment at a total depth of 3,580 feet.

### Isabella County

Three Isabella County tests were dry, two in the Dundee formation in Vernon and Gilmore Townships and one at the Michigan Stray gas sand level in Vernon Township last week. The Vernon failures included McClanahan Oil Co.'s No. 1 McKenzie, C SE SE Section 34-16n-4w, started for a Michigan gas test but carried to 3,861 feet as a Dundee oil test. Limestone was topped at 3,741 feet. A slight show of oil was struck near the top of the sand but the hole was being plugged. A. R. Sarver Oil & Gas Corp.'s No. 1 Bogan, Bogan and Schug, C NE SE Section 31, struck a slight show of gas in the Michigan sands at 1,511 feet but drilled into water at 1,519 feet.

W. Hunter Atha's No. 1 Horace Fordyce, C NW NE Section 34-16n-5w, Gilmore Township, drilled into water at 3,951 feet after topping the Dundee at 3,842 feet.

Wittmer Co.'s No. 1 Mike and Rose Hudak, E half SE NE Section 11-15n-4w, Isabella Township, is expected to make a small producer after treatment for a show of 1,100 feet of oil in the Dundee. Limestone was topped at 3,665 feet and the hole drilled to 3,710 feet.

### Ogemaw County

More than 500 bbls. of initial production was added to the output of Ogemaw County when nine wells were completed, or nearly completed, including one upper Traverse producer and one hole abandoned in the Berea.

Melling Oil & Gas Co.'s No. 1 State, SE SE NW Section 6-21n-3e, produced for some time in the upper Traverse but recently deepened to the Dundee, made 125 bbls. a day at a total depth of 2,613 feet. Dundee was topped at 2,436 feet. Same company's No. 4 State was completed in the upper Traverse with an initial flow of 120 bbls. in 24 hours. Traverse was struck at 1,680 feet and hole bottomed at 1,810 feet. The well was flowing by heads and had not been treated.

Strange & Fortney completed No. 1 State, NE NW SW Section 6, Mills Township, for an initial of 500 bbls. a day at 2,617 feet, topping the Dundee at 2,460 feet.

Patterson and Louis abandoned No. 1 Charles Ridgley, NW SW NW Section 5, Mills Township, plugging in the Berea at 1,199 feet when the formation was topped too low at 1,198 feet.

A 40-bbl. well was developed by Prudential Oil & Gas Co. in No. 1 Edith Donovan, SE SW NW Section 19-22n-2e, West Branch Township, at 2,760 feet after topping the Dundee at 2,596 feet.

Muskegon Oil Corp.'s No. 2 Arthur Fisk, NW NE NE Section 29, West Branch, made 265 bbls. in 72 hours after treatment in the Dundee topped at 2,539 feet and drilled to 2,718 feet. Muskegon Development Co. was preparing to place No. 1 J. Towner, NW SW NW Section 28, West Branch Township, on the pump as another 40 to 50-bbl. producer. It was drilled to 2,704 feet after topping Dundee at 2,535 feet. Drilled to a total depth of 2,714 feet, Weber Oil Co.'s No. 1 H. W. Schulty, NE NW NE Section 29, same township, was being treated.

Red-Man Oil Co.'s No. 1 Wobig heirs, SW NW SE Section 6, Mills Township, which indicated a possible flow of 200 to 400 bbls. daily from the upper Traverse the week before, was drowned out with water and shut in.

### New Locations

Ten permits for locations issued by the State Conservation Department included four in Ferris and Crystal Townships, Montcalm County, for Crystal area oil tests, two in Millbrook Township, Mecosta County for gas tests, one in Mills Township, Ogemaw County, and three for wildcats in Evergreen Township, Montcalm County, Ferry Township of Oceana County, and North Shade Township, Gratiot County.

The new Crystal tests will be: Fred W. Turner and others' No. 1 W. C. Taylor, SW NW SE Section 35-11n-5w, Ferris Township, Montcalm County: Isabella Oil Co., Inc.'s No. 1-A William E. Strait, SE SE SE Section 34, Ferris Township; T. F. Caldwell, Inc.'s No. 1 Cora J. and Jay Bailey, NE NW SW Section 35, same township, and Pure Oil Co.'s No. 2 H. S. and C. D. Preston, SE SE NE Section 3-10n-5w, Crystal Township.

Roy F. Ide, trustee's No. 1 Thomas Bright, C SE SW Section 33-13n-7w, and D. F. Jones' No. 1 Harry Bissel, C NW SW Section 32-13n-7w, are the two Millbrook-Mecosta gas locations.

H. M. and S. M. Walley will drill No. 1 William E. Himelhoch, NE NE SW Section 6-21n-3e, Mills Township, Ogemaw County.

The three wildcat locations include: Jackson-Meyer and Schmidt, trustee's No. 1 Newton Garner, NE SE SE Section 10-9n-4w, North Shade Township, Gratiot County; Frank J. Asam's No. 1 Fred Pakes, NE NE NE Section 7-10n-6w, Evergreen-Montcalm and Lawrence Howe and Earl C. Nelson, trustee's No. 1 Jennie William, NE NE NE Section 8-14n-16w, Ferry Township, Oceana County.

### Western Michigan

One western Michigan test failed to strike oil or gas in the upper Traverse, while two interesting locations were announced, one about 7 miles east of Bailey in Solon Township, Kent County, and the other in Wilcox Township, Newaygo County.

Dragoon Development Co., of Muskegon, struck water at 2,022 feet in No. 1 W. K. Young, SW NW NW Section 15-17n-15w, Logan Township, Mason County, near Walhalla. It may be deepened to the Dundee, it was said by Robert C. Lentz, head of the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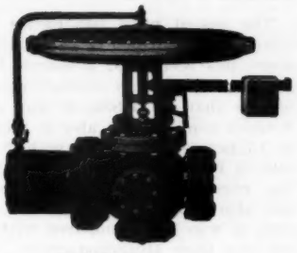

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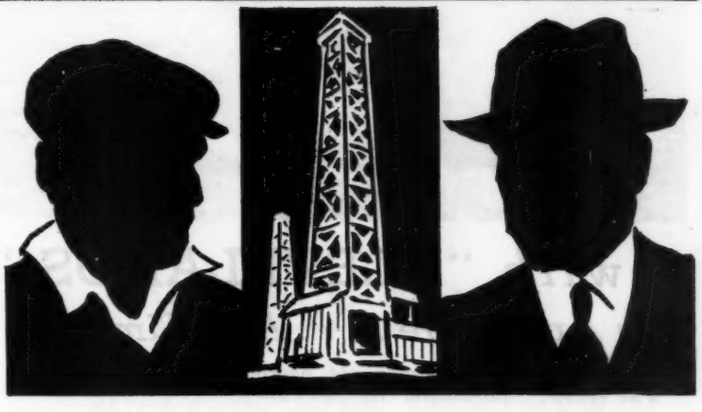

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company. Traverse was topped at 1,965 feet.

Reed Oil Co., of Muskegon, has rigged up a wildcat for the National Minerals Corp.'s No. 1 Jasper Lewis, SE SE SW Section 5-10n-11w, Solon Township, Kent County, east of Bailey. Triangle Petroleum Co., of Grand Rapids, will move in this week for a wildcat in Section 5, Wilcox Township, on a block of about 10,000 acres in Wilcox, Monroe, Merrill and Lincoln Townships, Newaygo County. Leases were taken on the strength of a department of conservation report in 1932 and a geological report by Hugh D. Crider, of the Muskegon Oil Corp., indicating possibility of a structure on the northwest trend from the Amble gas well brought in by L. G. Thompson. The company also may drill other tests, it was said by Edward B. Strom, who will direct field operations.

### Muskegon Price

Old Dutch Refining Co., August 1, reduced the posted price on Muskegon crude oil from $1 a barrel paid for several years to 90 cents a barrel effective at 7 a. m., August 1. Naph-Sol Refining Co. will continue a price of $1 a barrel, it was said by Walter E. Anderson.

In a letter to local producers Old Dutch said: "Price for Muskegon crude on a basis of specific gravity should be 20 cents a barrel less than Porter and Crystal oil, but in order not to penalize Muskegon producers too much we have established a differential of only 12 cents a barrel."

The posted price for Porter and Crystal crude, which is 42 gravity or more, has been $1.02 a barrel. Muskegon crude has an average gravity of less than 35 points, it was said. Sulphur content here also is greater at 1.7 per cent compared with .5 per cent in Porter and Crystal oil. Gasoline recovery from central Michigan oils also ranges from 38 to 44 per cent, it was said, compared with 25 per cent from Muskegon crude.

"We would prefer not to run any Muskegon crude, but will continue to do so as an accommodation to Muskegon producers," the Old Dutch letter stated.


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# *Canadian Fields*

# Alberta Production in June Slightly Below Total of May

By VICTOR LAURISTON

CHATHAM, Ontario, Aug. 3.—Crude production from Alberta fields in June was reported at 105,183 bbls. compared with 105,488 bbls. in May. Turner Valley naphtha was down from 100,579 to 100,331 bbls. and Turner Valley light crude dropped from 1,882 to 1,553 bbls. Red Coulee light crude declined from 1,901 to 1,716 bbls. but Wainwright heavy increased from 1,068 to 1,583 bbls.

In the Turner Valley Field Royalite Oil Co. was the major producer in June with 44,134 bbls. Increase in Royalite production was due to the yield from Royalite's No. 26 in North Turner Valley and the operation of the new gasoline absorption plant in South Turner Valley. The Mercury-Miracle-Mill City group, with production from the Gas & Oil Products absorption plant ranked second, with 15,628 bbls. and Model Oils, Ltd. third with 5,051 bbls. The largest individual producing well was Highwood-Sarcee Oils' No. 1 with 4,892 bbls., Century Royalties' No. 1 coming next with 4,872 bbls. Among the newer Turner Valley producers, Carleton Royalties' No. 1 delivered 2,674 bbls., Director Royalties' No. 1 produced 3,100 bbls., Pacalta Oils' No. 1 had 1,328 bbls. and Publix Oil & Gas Co.'s No. 1 produced 205 bbls.

In the Red Coulee Field, the Vanalta was the outstanding producing unit, with 1,134 bbls. In the Wainwright Field, Hargal Oils produced 566 bbls. and Edmonton Wainwright Oils No. 1 delivered 509 bbls.

### Turner Valley

In Section 28-18-2w5, South Turner Valley, British Dominion Oil & Development Corp.'s No. 4, LSD 6, is drilling into the Madison lime after cementing casing at 5,853 feet. Renfrew Royalties' No. 1, Morris & Goodfellow, LSD 3, same section, is resuming after cementing 8-inch casing in the Dalhousie sand at 5,540 feet. The Union-Freehold Oil Corp.'s No. 1, LSD 8, Section 21-18-2w5, is in the lime at 5,610 feet and fishing for lost drill pipe. In the North Turner Valley Field, Model Oils' No. 3, LSD 1, Section 22-20-3w5, is below 2,600 feet.

### Tests in Foothills

In the Forest Reserve area west of Olds, Hunter Valley Oil Co.'s No. 1 McLaren, LSD 12, Section 13-31-10w5, is below 5,033 feet.

On the Moose Dome west of Calgary, Moose Oils' No. 2, LSD 8, Section 29-22-6w5, is working in gravel after running 16-inch casing to 55 feet.

South of the Turner Valley Field, Maple Leaf Royalties' No. 1 Banner, LSD 6, Section 34-17-3w5, on the Highwood-Sinclair structure is below 1,915 feet after cementing caving formation between 1,675 and 1,850 feet. About 2,000,000 feet of gas was cemented off, but deepening has developed additional sweet gas, around 5,000,000 feet a day, which is used for drilling fuel. Formations have logged about one-third thicker than in Turner Valley, but the structure is higher, and the Home sand is anticipated around 2,100 feet. Farther south on the Pekisko structure, Pekisko Hills Co.'s No. 1, LSD 6, Section 6-17-2w5, is in the Madison lime below 2,750 feet.

On the Watson structure, north and west of Lundbreck, Raven Oils' No. 1, LSD 1, Section 20-9-2w5, is cleaning out preparatory to resuming from 1,225 feet.

### Aldersyde Structure

On the Aldersyde structure east of Turner Valley, Ranchmen's Gas & Oil Co.'s No. 1, LSD 16, Section 13-20-28w4, is deepening below 6,433 feet in a formation of soft bands of sand containing oil saturation alternating with hard bands of iron pyrites. The upper gas horizons were cased off, but the top of the new formation showed considerable gas.

On the New Valley structure, farther north, New Valley Oil Co.'s No. 1 is drilling new hole below 2,240 feet.

On the Rickert structure west of Turner Valley, Paramount Oils' No. 1, LSD 2, Section 28-19-4w5, is below 3,822 feet.

### Drilling in Saskatchewan

In the Lloydminster Field, western Saskatchewan, Colony Oil & Gas Co.'s No. 1, Section 25-49-27w3, has been tested by officials of the provincial natural resources department, showing a flow of 42,600,000 feet a day with 410 pounds rock pressure. The flow is reported ample to supply Regina and the other cities of Saskatchewan, and the early piping of the gas to North Battleford and Saskatoon is being considered. Colony Oil & Gas Co. has its office at Lloydminster. Colony's No. 2 has been located on the Morrison farm 2 miles south and 1 mile east of Lloydminster, and 1 mile west of No. 1 gasser, whose gas production will be used for drilling. Some 6,000 feet of pipe are being laid to the new location. No. 2 will spud early in August, and is expected to get the sand early in September. No. 1 was completed in 27 drilling days.

In the Simpson area, Simpson Oil Co.'s No. 2, LSD 2, Section 1-29-24w2, is1 below 1,150 feet in Colorado shale. Cable tools are being used. The test has encountered several shows of oil and gas, best being at 468 and 810 feet. O. L. Etter is in charge.

### Border Fields

In the border area of Southern Alberta, Plains Petroleum's No. 1 has been located in the Thos. Engleston farm, LSD 14, Section 25-9-14w4, about 1½ miles southwest of Taber, close to the highway. It is 2½ miles

from Cole-Hunter's No. 1 deep test in LSD 3, Section 11-10-17w4, which some years ago got encouraging shows of oil and gas but failed to develop commercial production. Derrick is being moved from the Sterling Royalties' No. 1 in South Turner Valley and heavy duty rotary equipment from Carleton Royalties' No. 1 will be used. Field office has been opened at Taber with W. E. Allaun in charge.

On the Del Bonita structure, Terminal Oil Co.'s No. 1, H. Orcutt location, NE Section 18-1-21w4, is redrilling after cementing back from 4,894 feet to overcome caving. It got a heavy flow of gas about 100 feet in the Ellis formation, and will run casing before deepening. E. Bruce Taylor of Calgary has leased 1,760 acres close to the Terminal location. On the Twin River structure south of Lethbridge, E. H. Rosenburg's No. 3 Twin River, LSD 9, Section 10-2-20-w4, is re-erecting derrick moved from Nordon-Roney's No. 2.

A number of Calgary companies, including Calmont Oils, United Oils, Wellington Oil & Gas Co., Vulcan Oils and Model Oils are interested in a test by Boyd Kyle and associates in Section 24-37-1w, on the Bow and Arrow structure close to the Alberta boundary. The Kyle test got gas shows at several horizons and a flow estimated 7,000,000 feet a day at 1,620 feet. The 10-inch casing was carried to 1,010 feet and 8-inch is being run to the main gas sand, before deepening to a potential oil sand. The Kyle interests have leased 2,000 acres aditional closer to the boundary and three sections on the Alberta side. The potential oil horizon is in the top of the lime around 2,100 feet.

### Ontario Operations

In the Dover Field, Kent County, Ontario, Prairie Oil & Gas Co.'s No. 4, Stephens farm, Lot 2, Front Concession, Dover East Township, got the Trenton limestone at 2,887 feet. At about 135 feet in the lime, before reaching the break, a gas flow estimated 3,500,000 feet a day was met. It will deepen past the break in hope of getting the oil sand encountered in Prairie's No. 3, about 750 feet east. Prairie's No. 3 is making about 55 bbls. a day after acid treatment. The Central Pipe Line Co.'s No. 2, Joseph Sterling farm, Lot 1, Front concession, is below 1,700 feet. Prairie Oil & Gas Co.'s No. 5, Vital Duphette farm, Lot 2, Concession 4, is below 800 feet.

East of the proven field, No. 1 test of F. H. Stover, George Rawlings and associates on the Charles Peltier farm, Front concession and Stirling Side Road, got the Trenton limestone at 2,807 feet and finished about 465 feet in the lime. It got a small gas flow, about 20,000 feet a day, 11 feet below the break in the Trenton. It is being abandoned and plugged. A flow of sulphur gas was struck between 1,550 and 1,630 feet. South of the River Thames, E. P. Rowe's No. 1, Bruette farm, Lot 5, Concession 2, Raleigh Township, is below 800 feet.

In the west end of the Dover Field, R. L. Pattinson and associates of Chatham are drilling a lime test for structure on the Bruce Bradley farm, SE W half Lot 5, Concession 4, Dover West Township. George Willets is handling the work. If structural conditions are satisfactory, a test of the Trenton limestone may be drilled. Harold Massey and associates of Windsor, Ontario, are planning to drill on acreage secured east of the proven field in Dover Township.

In the Tilbury Field, Kent County, J. W. Knight's No. 2, Guy Mifflin farm, Lot 7, Concession 14, Tilbury East Township, finished in the Tilbury sand at 1,403 feet. It was plugged back to 1,365 feet and shot in two horizons, developing only 10,000 feet a day, and was abandoned.

In the Eden Field, Elgin County, C. A. Simpson and associates' No. 2, Williams farm, Lot 25, Concession 8, Bayham Township, finished with a natural flow of 546,000 feet after drilling 28 feet into the Clinton sand. This blew down in 22 hours to 412,000 feet. It was shot with 100 pounds, measuring 623,000 feet a half hour after the shot and shut in pressure of 560 pounds after 36 hours.

On Pelee Island, Essex County, Pelee Island Petroleum Co.'s No. 1 got 4 feet of oil sand after drilling about 800 feet and between 6 and 8 feet deeper struck some water. It was plugged back and is now pumping around 1½ to 2 bbls. a day, with about 6,000 feet of gas.

In Dufferin County, near Orangeville, Hockley Valley Oil Co.'s No. 1, Ed Williams farm, Lot 11-12, Concession 7, Mono Township, is now the deepest well ever drilled in Ontario. It is around 5,177 feet in the arkose formation with 3¾-inch hole and making 6 to 10 feet a day. It started more than two years ago with 10-inch hole and is planned to continue another 500 feet for a thorough test of deep oil possibilities.

Senator E. Michener and associates have leased acreage on the Bowesville road near Ottawa, Ontario, and will drill a test for oil and gas.

## California Increases Natural Gasoline

Natural gasoline production in California during June increased 2,000 bbls. daily to 31,000 bbls. daily and refinery utilization showed a material increase of 9,000 bbls. daily and amounted to 36,000 bbls. daily according to the Bureau of Mines report. Shipment remained at 2,000 bbls. daily. Natural gasoline production during the first six months was 32,000 bbls. daily, the same as during 1934, but refinery utilization of 26,000 bbls. daily was 1,000 bbls. daily over the 1934 utilization for the same period. Shipments, which were 2,000 bbls. daily the first six months, were 1,000 bbls. daily less than for the same period in 1934. Stocks increased 280,000 bbls. during the month to 2,530,000 bbls.

**NATURAL GASOLINE INCLUDING LIQUEFIED PETROLEUM GAS**

| | Dly. av. bbls. June | Dly. av. bbls. May |
|---|---|---|
| Supply— | | |
| Total production | 32,077 | 30,243 |
| Stock transfer (deliveries) receipts—net | (278) | (300) |
| Total | 31,799 | 29,943 |
| DEDUCT refinery requirements: | | |
| Runs to stills | 2,388 | 1,398 |
| Blended | 33,508 | 25,243 |
| Total | 35,508 | 26,641 |
| ADD refinery output: | | |
| Straightrun | ..... | ..... |
| Natural gasoline—net | 198 | 315 |
| Net current supply | 3,511 | 3,617 |
| Demand— | | |
| Domestic demand including bunkers | 1,484 | 1,563 |
| Shipment to Alaska and Hawaii | 14 | 6 |
| Rail and truck shipments to U. S. points outside Pacific Coast territory | 5 | 3 |
| Demand in domestic market area | 1,503 | 1,572 |
| Shipments: | | |
| Pacific foreign including canal zone | 503 | 587 |
| Atlantic foreign | 1,567 | 1,715 |
| Total market demand | 3,573 | 3,874 |
| Losses (gains) unaccounted for—net | 2,252 | 2,992 |
| Total current demand | 5,825 | 6,866 |
| Surplus or (deficit) | (2,336) | (3,249) |

**NATURAL GASOLINE PLANT OPERATIONS JUNE, 1935**

| Field— | Gas treated (M.C.F.) | Natural gasoline produced (gallons) |
|---|---|---|
| SAN JOAQUIN: | | |
| Elk Hills | 70,817 | 120,922 |
| Kettleman Hills | 7,295,139 | 8,650,493 |
| Midway-Sunset | 1,205,060 | 2,465,013 |
| Mountain View | 615,997 | 614,767 |
| Miscellaneous | 415,862 | 640,597 |
| COASTAL REGION: | | |
| Elwood | 213,957 | 481,189 |
| Rincon | 84,026 | 112,935 |
| Santa Maria | 144,112 | 394,388 |
| Ventura Avenue | 2,912,061 | 3,575,215 |
| Miscellaneous | 247,652 | 261,862 |
| LOS ANGELES BASIN: | | |
| Coyote | 472,850 | 757,173 |
| Dominguez | 854,122 | 1,521,865 |
| Huntington Beach | 2,062,940 | 3,359,648 |
| Inglewood | 179,180 | 256,193 |
| Long Beach | 2,121,554 | 6,723,501 |
| Playa Del Rey | 910,843 | 1,590,719 |
| Richfield | 391,699 | 679,325 |
| Rosecrans | 533,521 | 764,495 |
| Santa Fe Springs | 2,706,032 | 4,518,156 |
| Seal Beach | 444,220 | 563,499 |
| Torrance | 102,560 | 224,609 |
| Miscellaneous | 323,149 | 812,022 |
| Total (all fields) | 24,307,353 | 39,098,586 |

**DISTRIBUTION (GALLONS)**

| | | |
|---|---|---|
| Stocks beginning of month | 3,412,751 | |
| Production during month | 39,098,586 | |
| Delivered to refineries | | 35,416,718 |
| Delivered to jobbers, brokers or blenders | | 3,572,904 |
| Blended at plants for production of motor fuel | | 5,818 |
| Losses | | 255,240 |
| Stocks end of month | | 3,258,657 |
| Total | 42,511,337 | 42,511,337 |
| Liquefied petro. gas production | 1,318,769 gals. = | 31,399 bbls. |
| Motor fuel produced | 7,745 gals. = | 185 bbls. |

## Oklahoma City Geologists

The Oklahoma City Geological Society will hold its annual field trip and party on Saturday afternoon and Sunday, August 10 and 11, in Sulphur, Okla. On Saturday afternoon and evening there will be a baseball game, swim, barbecue chicken dinner and dance. The field trip will start from Hotel Artesia at 8 a. m., Sunday morning. This trip will be about six hours in duration and will cover geological phenomena in the Arbuckle Mountains, concluding with a barbecue dinner at the Harper and Turner ranch.


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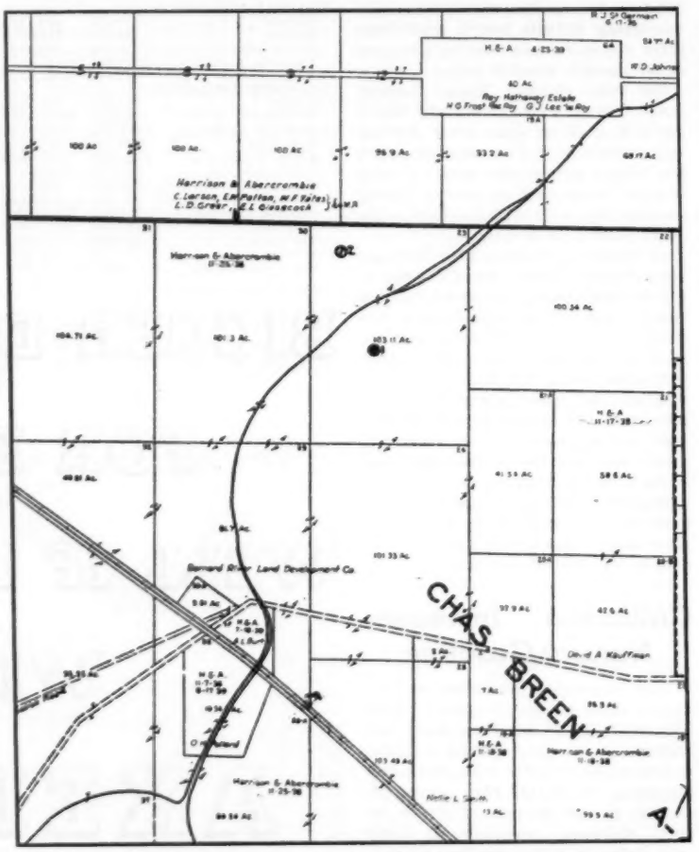
# DEEP DISCOVERIES TESTED IN HIDALGO AND GOLIAD AREAS

By GEORGE WEBER

SAN ANTONIO, Tex., Aug. 5.—Two new fields, one in Hidalgo County and one in Goliad County, were added during the week to the long list of producing areas opened in Southwest Texas so far this year. Also, prominent in the week's activities were important completions in the prolific Rio Grande district and increased drilling and leasing in the Laredo district.

The latest field to be proven is about 8 miles of Edinburg, in Hidalgo County. This pool, second in depth to the Mercedes Field, also in Hidalgo County, was proven by Gulf States Oil Co.'s No. 1 John Engleman, in Lot 3, Block 70, Las Mestenas grant. The well was completed flowing through drill stem. In attempting a drill stem test the pipe stuck in the hole at 6,630 feet. In trying to remove the stuck drill stem, the testing tool opened and the well made water and gas through the drill stem. The operators then cemented the drill stem inside the casing and welded the drill stem to the surface casing at the top of the hole and set up their connections. The well is now producing about 50 bbls. of light distillate and 20,000,000 feet of gas per day through a one-quarter inch choke. The producing sands are at 6,670 and 6,740 feet.

This discovery will add to the activity in deep well prospecting and drilling in Hidalgo and Starr Counties. Acreage around the discovery is held practically solid by the Texas-New York Development Co., McCollum Exploration Co., which mapped the area, and Deering and Kayser.




Section of Hidalgo County, showing the discovery well of Deering and Kayser's No. 1 Engleman

### Sam Fordyce

In the Sam Fordyce Field three completions were made. Henshaw and Rothert's No. 1 C. E. Smith, Tract 3-B, Porcion 41, came in to produce its allowable from sand at 2,742-47 feet. The well is flowing through a three-thirty-seconds inch choke with a tubing pressure of 55 pounds and a casing pressure of 60 pounds.

Harrison-Davis-Bishop's No. 3 Guerra, Tract 12, Porcion 41, after being shut in last week and cleaned, is now making its allowable through a three-thirty-seconds inch choke with a tubing pressure of 175 pounds and a closed-in casing pressure of 400 pounds. The producing sand is at 2,748-53 feet.

Windsor Oil Co.'s No. 3 Doss, Tract 278, Porcion 40, is also making its allowable through a one-eighth inch choke from sand at 2,747-52 feet.

In the same field three other wells are reported testing. Harrison Oil Co. and D. D. Oil Co.'s No. 3 Mrs. Lula George, after coring a gas sand at 2,707-44 feet, hit shale at 2,744-46 feet and saturated sand at 2,746-57 feet. Casing has been set at 2,752 feet and operators are waiting on cement. This well is in the northwest corner of the southwest 20 acres of Tract 13, Porcion 41.

Cortez Oil Co.'s No. 1-C Smith, 230 feet from north and west lines of northeast 40 acres in Tract B-3, Porcion 41, perforated casing this week and was full of oil with insufficient pressure, however, to make it flow. Further perforating in the cored sand will be undertaken.

W. F. Lacey's No. 1 Seabury in Tract 256, Porcion 8, cored sand at 2,761-64 feet. The plug has been drilled and liner and tubing run. The well is expected to begin producing early in the week.

### Laredo

In the Laredo district, several completions were made. New locations also ran high. This week saw the largest lease in the history of the district made when O. W. Killam, independent operator and lease holder, took the 73,000-acre L. R. Ortiz ranch in Webb County. The ranch extends to the northwest, north, northeast and east of Laredo and lies close to the city. The plans for development of this huge tract will not be made public until the return of Mr. Killam to Laredo. The area to the north of Laredo is being extensively developed by wildcatters at the present time. Arthur H. Wray's No. 1 Stuempke, in Block 37, Survey 2, Share 1, in the Juaquin Galan grant, is to be drilled with heavy equipment, possibly to the Carrizo or Wilcox sands. After shutting down at 1,125 feet, activity has been resumed to deepen the hole.

### Loma Novia

In the proven areas, Loma Novia showed the greatest activity, with seven completions. Highland Oil Co.'s No. 1 Hubbard, Survey 72, produced 100 bbls. per day from 2,690 feet. Hamill, Smith and Ogden's No. 6 Hubbard, Section 77, produced 15 bbls. through a one-half inch choke at 2,624 feet. Rodney DeLange's No. 2 Hahl, in Survey 78, produced 27 bbls. per hour through a nine-sixteenth inch choke from sand at 2,648-85 feet. Shell Petroleum Corp.'s No. 2 Hubbard, in Survey 77, produced 15 bbls. per day from sand at 2,772-97 feet. Rosen Oil Co.'s No. 3 Hubbard, Survey 84, produced 26 bbls. per hour at 2,781 feet. Lipscomb, Daubert and others' No. 1 Hubbard, Survey 75, was completed at 2,656 feet, flowing 30 bbls. per hour. It is now being swabbed. E. R. Thomas' No. 2 Hahl, Survey 63, flowed 17 bbls. per hour through a one-half inch choke at 2,626 feet.

### Government Wells

Two completions were made in the Government Wells Field. Magnolia Petroleum Co.'s No. 3 Duval County Ranch Co., in Survey 77, was completed at 2,190 feet, flowing 480 bbls. per day. Smith & Storey's No. 15 E. C. Lundell, in Survey 48, produced 30 bbls. per hour from 2,294 feet.

### Cole Field

In the Cole Field, to the south of Government Wells, three more wells were brought in. Magnolia Petroleum Co.'s No. 8 Seacord-Benavides flowed 10 bbls. per hour at 2,798 feet. Texas Co.'s No. 1 S. Benavides was completed at 2,761 feet. Ed Mims and others' No. 2 Benavides was completed at 2,807 feet flowing 15 bbls. per hour. All these wells are on the Myrtle E. Hale Subdivision of the Mariano Arispe grant.

### Goliad County

Brown & Wheeler's No. 1 Kaufman in western Goliad County continued to be the center of attention in Southwest Texas this week as the discovery well of a new field. At 4,543 feet, 5 feet in the Conroe sand, the well started making 15 to 20 bbls. per hour with a casing pressure of 500 pounds. As it cleaned itself the pressure increased and the volume of oil fell. It is now making about 150 bbls. per day through a one-eighth choke.

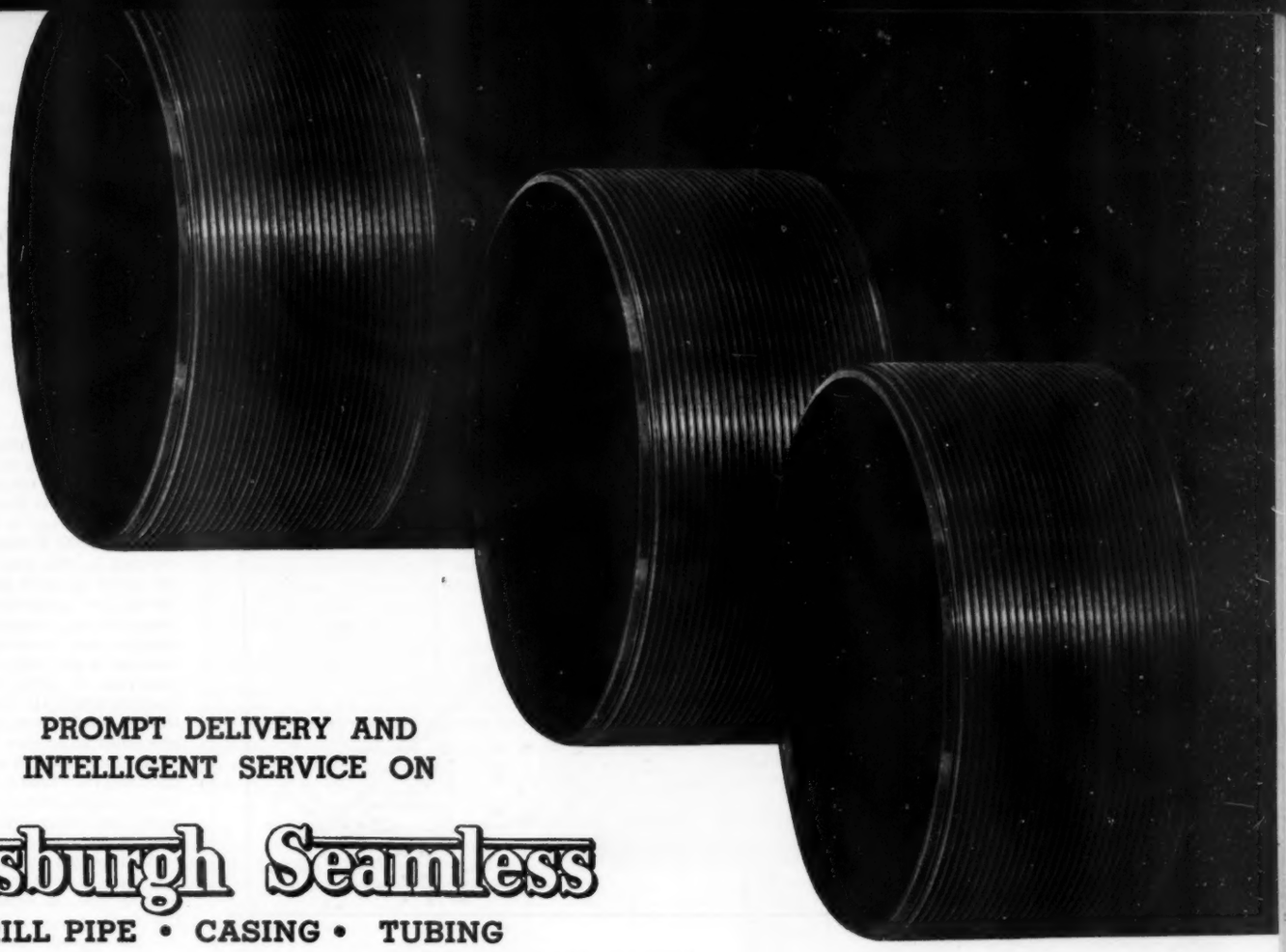
George M. Church's No. 1 Wood, after drilling plug at 4,832 feet, failed to make more showing and is being drilled deeper. It was believed the well would produce from the Hockley, and completed by perforation.

### Plymouth Field

In the Plymouth Field, San Patricio County, three completions were made by Plymouth Oil Co. No. 7-C Welder in Section 45 was completed as an average well from sand at 5,620-35 feet. No. 8-C Welder in Section 49 made 150 bbls. through a 3/16-inch choke at 5,625 feet. It showed a tubing pressure of 275 pounds and a casing pressure of 650 pounds. No. 1-D Welder in Section 1 was completed as a gas well at 5,893.

### Bee County

Mills Bennett Production Co. completed No. 1-C Harris on the John L. Dugat Survey in the Dirks Field, Bee County, for 25 bbls. per hour at 3,872 feet. Two more producers were added to the Ray Pool in Bee County with the completion of Tide Water Oil Co.'s No. 1 Ray at 3,940 feet, and Magnolia Petroleum Co.'s No. 2 Ray, making 15 bbls. per hour at 3,938 feet.



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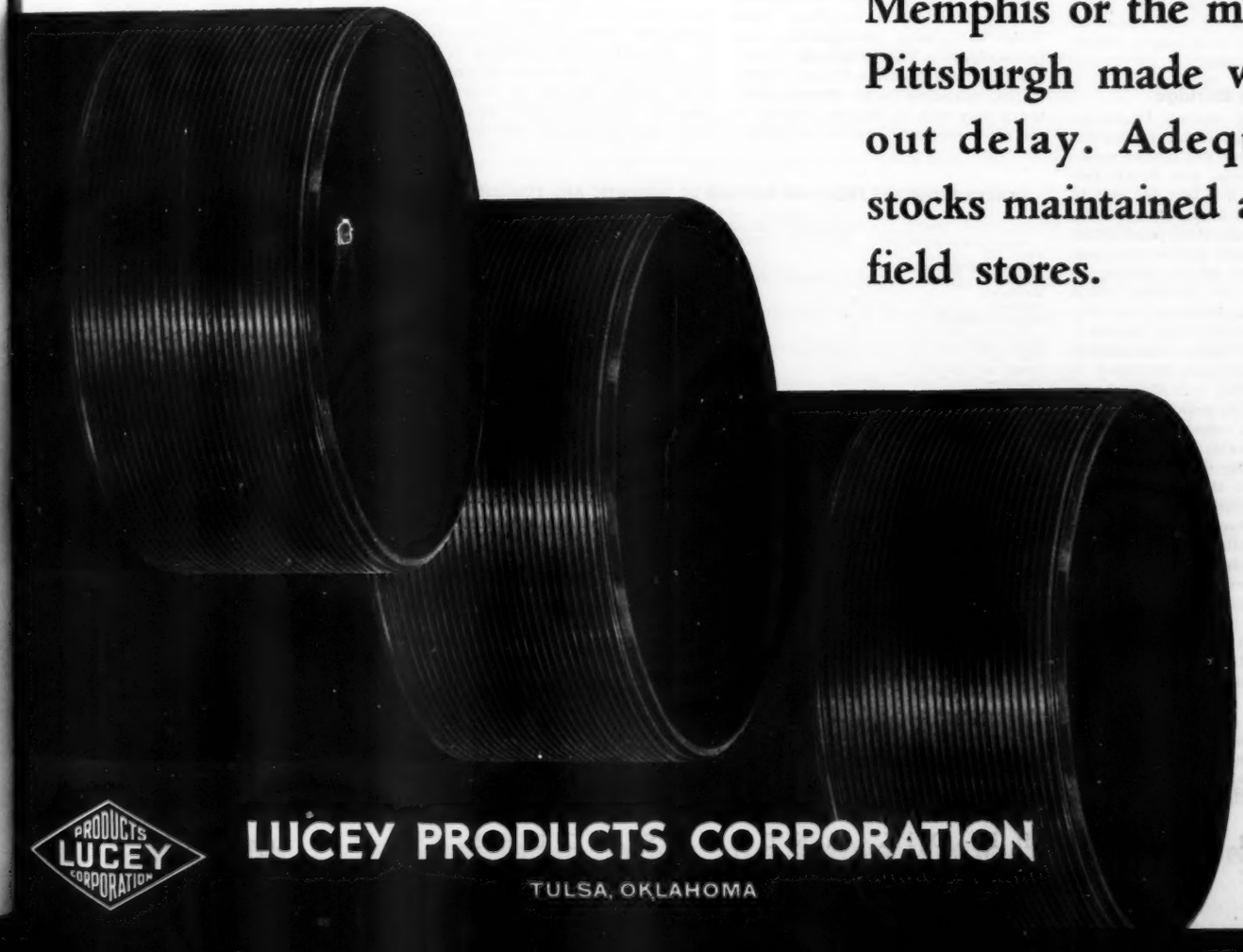

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## LUCEY PRODUCTS CORPORATION

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# California Field Report

By
L. P. STOCKMAN

# DRILLING PACE MAINTAINED AT HIGHEST RATE SINCE 1931

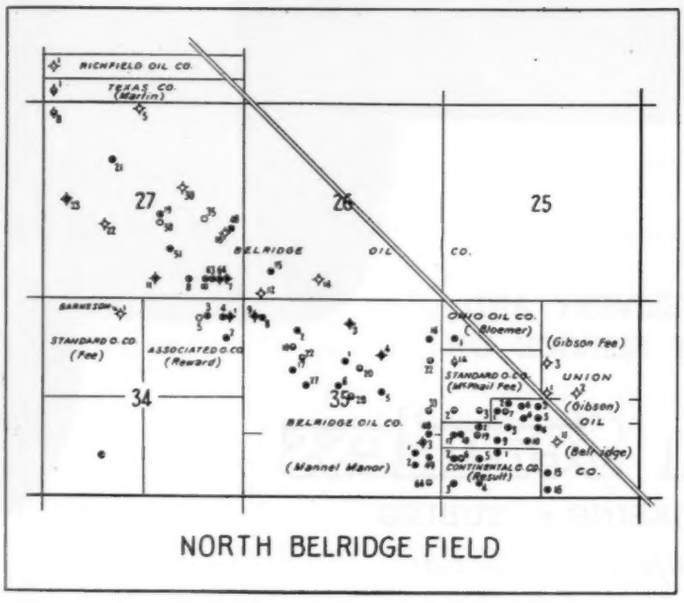
LOS ANGELES, Calif., Aug. 5.—Drilling operations in California are holding up to the pace established early in the year and the prognostication made several months ago that 1935 would be the biggest year, from a drilling standpoint, since 1931 will undoubtedly be fulfilled. As soon as one field tapers off a little some other district steps into the picture and takes up the slack. Development work in the Palisades section of the Playa Del Rey Field is registering a declining tendency but this decrease is being offset by increased drilling in the Semi-Tropic gas field of Kern County and at North Belridge. In the latter district, Union Oil Co. recently started a well on the Belridge property and another on the Gibson lease. Continental Oil Co. immediately offset these projects and this well is a little below 1,500 feet.

North Belridge is one of the few fields in the state that has conformed with curtailment to the minutest degree notwithstanding it is capable of producing far more than its allowable. The productive acreage is all held in relatively large blocks by operators who are more interested in the future of the oil business than in any immediate necessity for cash. Operators in the North Belridge Field made a gentlemen's agreement a few years ago to proceed with conservative development work but to adhere rigidly to curtailment.

### South Belridge

The failure of General Petroleum Corp. to get commercial production on the Berry lease has tended to divert attention from the South Belridge Field but it might be well to keep this field in mind when considering future production possibilities because the General Petroleum's test was not conclusive by any means. As a matter of fact, No. 1 Berry, which has been standing suspended for several months at 11,377 feet, showed a lot of promise before mechanical trouble developed and prevented a conclusive test. This well showed sufficient evidence to indicate expectation of developing commercial production under favorable conditions but mechanical trouble developed at the last moment and thus its status is more or less problematical but nevertheless undetermined.

Operators familiar with the problems incident to deep drilling are of the opinion the extremely high temperatures encountered in the bottom of this hole had a tendency to bake the drilling mud deposited on the walls during drilling and thus prevented a conclusive production test by sealing up the pores. The fact this well showed a gas pressure high enough to necessitate the use of a weighting material to keep the gas under control is evidence it had something to justify the drilling expense when one considers the hydrostatic pressure of a column of heavily weighted drilling fluid. Despite this the well surged and headed several times. Several attempts to develop deep production in the Lost Hills Field have been unsuccessful, due primarily to a high head water zone, but this field justifies further exploration. Standard is at present drilling a deep test in Section 2-26-20 in the most northerly tip of the structure but hole is not yet deep enough to pick up pay if it is present.



NORTH BELRIDGE FIELD

### New Wells

Despite the agreement to restrict production severely and conform with proration, operators have consistently engaged in the drilling of new wells although the scope of work has been rather limited in extent. At present there are eight wells under way most of which will be carried to the Eocene. Union and Standard are each working on two new wells, Continental Oil Co. on one and Belridge Oil Co. on three. Two productive horizons, one in the Temblor and another in the Eocene, have been discovered in this field in addition to the upper oil sand that has been producing for a number of years. Belridge Oil Co., largest holder of productive and potentially productive acreage in the field, is credited with discovery of both zones. This company pioneered the Temblor and after finding this horizon highly productive proceeded to explore in another well which found the Eocene equally productive. The Temblor is rather limited in areal extent and most of the wells now being drilled will be carried to the Eocene.

Belridge Oil Co. controls most of the Temblor production but operators holding acreage around the edge of the field, Union, Continental, Ohio, Associated and Standard hold sufficient acreage to justify expectation that each will be able to complete one or more new wells in the Eocene. Belridge's Eocene discovery well was shut in immediately on completion and has remained on the voluntary inactive list for more than two years. North Belridge and the Kettleman North Dome Fields, both of which have conformed with curtailment requirements, will be important factors in production long after some of the fields overproducing have ceased to be of any consequence.

### Semi-Tropic

Fullerton Oil Co. added two gas wells in the Semi-Tropic gas field of Kern County this week and should complete another, No. 23 in Section 14-27-23, within a day or two. The company started off the week by finishing No. 37 in Section 25-27-23 good for 24,560,000 feet of gas per day. The hole was bottomed at 2,427 feet and finished with a 6⅝-inch liner including 93 feet of perforated. No. 77 in Section 15-27-23 was subsequently completed and brought in flowing a little less than 25,000,000 feet per day from 2,449 feet. These shallow wells are, in many instances, finished from spud to completion in less than 15 days. Standard and Superior should each finish a well within the week. The latter's No. 1 Bradford showed up well on a short formation test at 2,418 feet and is now being prepared for an early test. The Delano gas field is quiet as Standard is concentrating its drilling activities at Semi-Tropic where production is more satisfactory and development costs much lower.

Kern River Oilfields Co. has completed No. 3 in Section 25-28-27 out on the West Front of the Kern River Field where operators have been busy for several months. Within a week or so Chanslor-Canfield-Midway Oil Co.

**TANKER SHIPMENTS FROM LOS ANGELES TO DOMESTIC AND FOREIGN PORTS**

| | July 21 | | July 14 | | | |
|---|---|---|---|---|---|---|
| Intercoastal-domestic: | Total this week | Daily average | Total last week | Daily average | This year to date | Same time last year |
| Fuel oil | ..... | ..... | ..... | ..... | ..... | 8,614,310 |
| Diesel and gas oil | ..... | ..... | ..... | ..... | 527,098 | 1,000,056 |
| Gasoline | 76,583 | 10,998 | 192,911 | 27,559 | 4,239,705 | 4,026,389 |
| Kerosene | ..... | ..... | ..... | ..... | 669,351 | 648,080 |
| Asphalt | ..... | ..... | ..... | ..... | ..... | 70,919 |
| Other finished oil | ..... | ..... | ..... | ..... | ..... | 54,778 |
| Foreign exports: | | | | | | |
| Crude oil | 346,251 | 52,036 | 98,942 | 14,135 | 6,610,886 | 4,170,545 |
| Fuel oil | 221,728 | 31,675 | 309,228 | 44,175 | 7,250,801 | 7,085,946 |
| Diesel and gas oil | 86,193 | 12,313 | 165,681 | 23,669 | 2,594,348 | 2,538,893 |
| Gasoline | ..... | ..... | 47,914 | 6,845 | 3,344,163 | 2,339,801 |
| Kerosene | ..... | ..... | 41,760 | 5,966 | 813,478 | 1,140,211 |
| Other finished oil | ..... | ..... | ..... | ..... | ..... | 3,529 |
| Other unfinished oil | 30,485 | 4,355 | 2,540 | 506 | 99,847 | 186,969 |
| Coastwise-domestic: | | | | | | |
| Crude oil | 125,463 | 17,915 | 130,459 | 18,637 | 3,245,561 | 4,925,427 |
| Fuel oil | 163,426 | 14,775 | 126,053 | 19,436 | 5,300,099 | 4,954,270 |
| Diesel and gas oil | 16,631 | 2,376 | 6,089 | 870 | 540,012 | 390,822 |
| Gasoline | 250,956 | 40,137 | 260,610 | 37,230 | 5,891,384 | 6,401,688 |
| Kerosene | ..... | ..... | ..... | ..... | 77,140 | 87,233 |

**TANKER SHIPMENTS FROM SAN FRANCISCO TO DOMESTIC AND FOREIGN PORTS**

| | | | | | | |
|---|---|---|---|---|---|---|
| Intercoastal-domestic: | | | | | | |
| Fuel oil | ..... | ..... | ..... | ..... | ..... | 110,650 |
| Diesel and gas oil | ..... | ..... | ..... | ..... | 157,258 | 448,113 |
| Gasoline | ..... | ..... | ..... | ..... | ..... | 145,806 |
| Kerosene | ..... | ..... | ..... | ..... | 149,715 | 276,412 |
| Asphalt | 67,215 | 9,602 | ..... | ..... | 348,064 | ..... |
| Lubricants | 5,951 | 850 | ..... | ..... | 35,172 | 26,500 |
| Foreign exports: | | | | | | |
| Crude oil | ..... | ..... | ..... | ..... | 1,426,499 | 1,005,072 |
| Fuel oil | 103,839 | 14,834 | 60,074 | 8,582 | 1,205,221 | 1,067,342 |
| Diesel and gas oil | 101,261 | 14,466 | ..... | ..... | 731,609 | 818,270 |
| Gasoline | 73,918 | 10,560 | 152,337 | 21,762 | 1,672,949 | 1,879,043 |
| Kerosene | 14,772 | 2,110 | 21,384 | 3,055 | 483,712 | 510,089 |
| Lubricants | 4,615 | 659 | 1,710 | 244 | 136,399 | 89,744 |
| Other finished oil | ..... | ..... | ..... | ..... | ..... | 2,760 |
| Other unfinished oil | ..... | ..... | ..... | ..... | ..... | 5,759 |
| Coastwise-domestic: | | | | | | |
| Fuel oil | 147,580 | 21,081 | 193,218 | 27,603 | 3,488,967 | 2,916,684 |
| Diesel and gas oil | ..... | ..... | ..... | ..... | 141,667 | 160,129 |
| Gasoline | ..... | ..... | 106,739 | 15,248 | 2,700,262 | 2,362,524 |
| Kerosene | ..... | ..... | ..... | ..... | 60,647 | 57,464 |

and Republic Petroleum Co. should each finish another well. In the Mount Poso Field of Kern County, Cliff Baker has completed No. 1 in Section 33-27-28 and is making preparations to start another on the same property. The well just finished was brought in pumping 412 bbls. of 16.1 gravity per day from 1,684 feet. The Union will have No. 26 S. & M. ready for a production test within the next few days and Shell should be able to make a test on No. 11 Vedder-Rall shortly. Honolulu Oil Corp. is stepping right along with its development program in the Round Mountain Field and will have No. 66 in Section 18-28-29 ready for a production test within a few days. The company is making preparations to start four new wells.

### Mountain View

Two wells have been finished in the Mountain View Field of Kern County within the week. Texas Co. added another producer on the Mateo Smith lease when No. 2 was brought in flowing 2,498 bbls. of 30.4 gravity and 6,500,000 feet of gas per day from 5,501 feet. This well is producing from the Santa Margarita. The large volume of gas is very welcome as it indicates the well should show substantial production over a period of time. In many cases, wells in this field show only a small amount of gas. Mohawk Oil Co. succeeded in completing No. 6 Hood flowing 4,461 bbls. of 30.5 gravity and 1,600,000 feet of gas per day from 5,930 feet after the hole had been finished with a 5⅝-inch liner carrying 511 feet of perforated.

### Long Beach

Operators had a busy week in the Long Beach Field as they completed five new wells and one recompletion. The latter was D'Angelo Oil Co.'s No. 1 Signal returned to production pumping 48 bbls. of 26.1 gravity per day after the hole had been reconditioned. Chief Oil Co. got a good well upon the completion of No. 3 Long Beach at 4,086 feet after landing an 8⅝-inch liner including 188 feet of perforated. This new well did not have kick enough to result in a natural flow but by installing a compressor the company finished a 621-bbl. well, testing 24.1 degrees and being exceedingly clean. Bernal Oil Co.'s No. 4 Signal, finished at 5,833 feet was good for 144 bbls. per day but the output is still cutting about 45 per cent and may require further work. Dav-Mar Oil Co.'s No. 9 was finished pumping 51 bbls. of 25 gravity per day from 4,400 feet. Utah Oil Co.'s No. 1 Painted Hills and Winslow Oil Co.'s No. 1 Signal were both small pumpers. The former, finished at 3,988 feet was good for 101 bbls. per day but is building up and may show a much higher production after it has had a chance to clean itself out. Winslow Oil Co.'s No. 1 Signal was bottomed at 3,385 feet and brought in doing 71 bbls. of 24.1 gravity per day.

Associated Oil Co. finished an excellent well in the Seal Beach Field of Los Angeles Basin a few days ago when No. 14 Bryant was brought in flowing 696 bbls. of 28.2 gravity and 1,181,000 feet of gas per day from 6,439 feet. Continental Oil Co. is experiencing water trouble in No. 36 Bixby, bottomed at 6,457 feet, and may require another string of pipe as water was located below the shoe of the water string landed at 5,985 feet. In the Santa Fe Springs Field, Union Oil Co.'s No. 84 Bell completed at 4,548 feet was finished pumping 351 bbls. of 34.5 gravity per day but the output is still cutting about 20 per cent.

### Wildcat Exploration

Although no definite plans have been announced, it is believed Western Gulf Oil Co., discoverer of the Fruitvale Field of Kern County, will begin the drilling of another test north of Coalinga before the current year draws to a close. Western Gulf has drilled two dry holes in this area but the first hole showed enough to justify further work as it logged definite oil showings and these were so good the company could not pull out until it had conclusively tested out the entire district. Western Gulf originally had approximated 100,000 acres tied up along the west side of the San Joaquin Basin between Coalinga and Los Banos, but has quitclaimed about 25,000 acres considered as being out of the picture.

This company has expended about $1,000,000 in lease rentals and drilling expenses and has such a large investment it is almost sure another deep test will be drilled soon. It is probable the company will try northwest for its next test as this section seems to offer the best prospects.

There is no reason why there should be a very definite and sharp separatrix north of the Coalinga Field beyond which no commercial production can be developed. Most of the geological fraternity for a long time consistently condemned the Chowchilla district but Pure Oil Co. finished a large gas well. This area is still wildcat acreage but if Pure's second projected test proves to be another substantial gas well it may justify additional development.

### Tehama County

Northern Counties Petroleum Co. has reached 4,767 feet in No. 1 Ewers-Mooney, a wildcat in Tehama County in Section 25-23-3. The company is using 72-pound drilling mud which would produce a pressure on the bottom of the hole of approximately 2,300 pounds per square inch. Despite this pressure, the well flowed over the blowout assembly for almost an hour while the crew was coring recently at 4,715 feet. The well also surged strongly and overflowed the assembly again while the crew was coring at 4,738 feet. The gas, ignited at the flow line, blazed up from 1 to 4 feet. Drilling operations are being supervised by T. F. Harriss, resident geologist of the company.

Fossils recovered in coring operations within the past 100 feet include badly preserved coiled arenaceous and trochoid calcareous, iridescent Baculites with characteristic sutures and fragile brown pelecypods. The dip of the structure is approximately 6 degrees at 4,767 feet. The well has consistently shown gas and at times an oily scum but apparently it will require further drilling before a definite oil sand is encountered. From now on the crew will be obliged to core frequently in order that no promising sand may be passed up. If this company should succeed in developing commercial production it will result in the wildest rush of operators to the north and central part of the state. Many of the larger companies have held substantial blocks of acreage in Tehama and adjacent counties but have not made much of an attempt to explore.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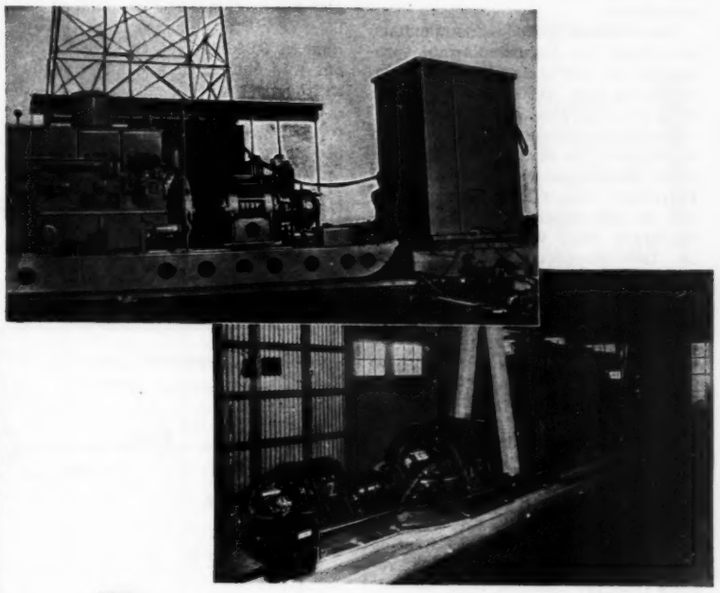

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GENERAL ELECTRIC

# Kansas Developments

By JAMES McINTYRE

# OXFORD POOL DOLOMITE PAY SUPPLIES 6,000 BARREL WELL

Twenty-nine wells were completed in Kansas fields in the past week, including oil wells and dry holes. It was an unusual number of completions for one week and exceeded the new operations.

The Kansas Corporation Commission fixed the August allowable production per day at 139,858 bbls., a decrease of over 16,000 bbls. from the allowable for July.

The old Oxford pool in Sumner County supplied the big news of the past week in Kansas when the Amerada Petroleum Corp.'s No. 9 Gassoway in SW SE SW Section 14-32-2e, an old Stalnaker sand well, was deepened to the Simpson series, topping Dolomite at 2,820 feet and getting a pay at 2,833 feet, total depth 2,886 feet. It flowed 10 hours on Saturday producing 2,480 bbls., or at the rate of 5,952 bbls. per day. On the previous Thursday when it began flowing it made 150 bbls. per hour at 2,884 feet increasing as the hole was deepened until it reached a 252-bbl. per hour production at 2,886 feet.

The next well to get this deep pay should be Lario Oil & Gas Co. and Barnsdall Oil Co.'s No. 3-A Wenrich, 200 feet south and 1,020 feet west of NE cor. NW Section 23-32-2e. The results thus far attained from deepening to the Dolomite will mean a general deepening of wells in the field which was discovered in 1927 and which has been highly productive from Stalnaker sand.

### Kansas Production

Estimated daily average production of Kansas for the week ending August 3 and for the preceding week follows:

| | Barrels | |
|---|---|---|
| | Aug. 3 | July 27 |
| Burrton | 20,375 | 22,325 |
| Ritz-Canton | 7,525 | 7,500 |
| Hollow | 3,825 | 4,650 |
| Voshell | 4,550 | 5,025 |
| Johnson | 1,100 | 1,150 |
| Nickel | 3,575 | 3,550 |
| Sedgwick County | 7,725 | 7,925 |
| Ellsworth County | 7,495 | 7,806 |
| Harton County | 2,550 | 2,325 |
| Rice County: | | |
| Chase Pool | 15,375 | 17,900 |
| Raymond Pool | 2,750 | 2,350 |
| Remainder | 5,835 | 9,150 |
| Ellis County | 590 | 462 |
| Kingman County | 835 | 798 |
| Stafford County | 2,445 | 2,276 |
| Russell County | 13,485 | 14,725 |
| Greenwood County | 10,450 | 10,800 |
| Butler County | 18,900 | 18,900 |
| Other pools | 16,510 | 12,923 |
| Total Kansas | 145,725 | 153,050 |

### Russell County

Ten completions were recorded in Russell County in the past week: Hartman & Blair's No. 1 Baier, 330 feet north and 1,570 feet west of SE cor. Section 35-13-15, was given a 450-bbl. potential rating, producing from Siliceous lime at 3,310-15 feet. It pumped 135 bbls. of oil in five hours and 20 minutes.

J. M. McMorrow and others' No. 1 Atherton, NW NW NE Section 30-30-14w, was rated potentially at 560 bbls. Before it was acidized it pumped 274 bbls. of oil in 24 hours. Then it was treated, and doubled its production for a one-day period. It produces from Siliceous lime at 3,281-89½ feet.

Gypsy Oil Co.'s No. 1 Pierce, NW NW SE Section 2-14-15w, pumped 785 bbls. of oil in 19 hours from Oswald lime at 3,056-81 feet two weeks ago but was not called a completion until the past week.

Central Petroleum Co.'s No. 1 Foster, SW SW NW Section 3-14-15w, producing from Oswald lime at 3,039-3,106 feet, was acidized and pumped 616 bbls. in 24 hours.

Stanolind Oil & Gas Co.'s No. 1 Baxter, NE NE NW Section 5-14-15w, had Oswald lime at 3,044-94 feet. It was acidized and later pumped a 74-bbl. initial production.

J. C. Schaffer, Inc.'s No. 1 Cram, NE SE SE Section 11-14-15w, producing from Oswald lime at 3,025 feet, total depth 3,305 feet, 7 feet in Siliceous lime, and plugged back to 3,130 feet, was acidized and made a poor showing, producing 34 bbls. of oil and 34 bbls. of water.

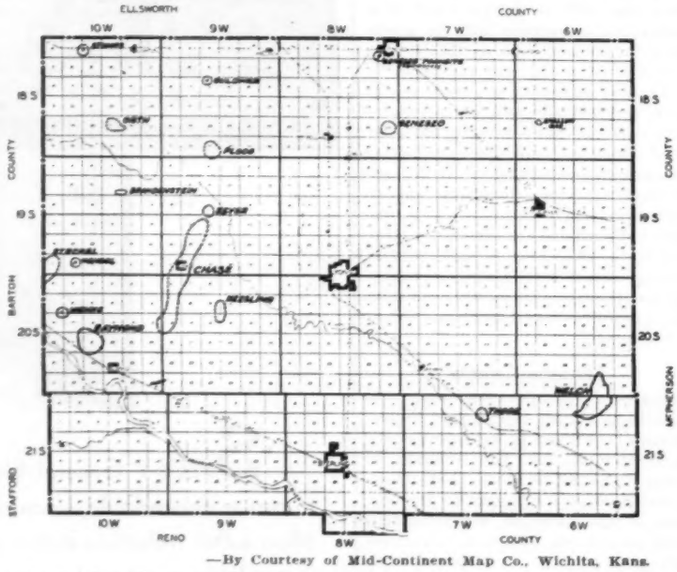
Russell Oil Corp.'s No. 3 Miller, SE SW SE Section 30-14-13w, produced 725 bbls. in 24 hours after an acid treatment in Oswald lime at 2,877-2,975 feet.

J. J. Hall and others' No. 2 Miller, NE cor. Section 31-14-13w, had Oswald at 2,880 feet, total depth 3,157 feet. It was acidized and pumped 210 bbls. of oil and 90 bbls. of water in 24 hours.

Empire Oil & Refining Co.'s No. 1 Bender D, SE SW SE Section 23-15-14w, was drilled to Siliceous lime at 3,355-75 feet, which was acidized, yielding 60 bbls. of oil and 400 bbls. of water. This was last February. It was plugged back to 3,368 feet and drilled to 3,374 feet. It was idle for many weeks, but was completed in the past week. It produced 20 bbls. of oil and 400 bbls. of water.

Empire Oil & Refining Co.'s No. 3 Krug, NE NW NW Section 24-15-14w, was abandoned as a failure at 3,831 feet. It produced some oil from Siliceous lime after an acid treatment. Siliceous lime was topped at 3,368.

New work in Russell County includes the Texas Co.'s No. 2 Johnson, 330 feet from north and 1,097 feet from west lines of NE ¼ Section 2-14-15w, building rig; J. C. Schaffer, Inc.'s No. 1 Polcyn, SE SW NE Section 14-14-15w, location; Phillips Petroleum Co.'s No. 1 Hall, SE NE SW Section 36-14-15w, location; Phillips Petroleum Co.'s No. 1 Rexroat, SE SW SW Section 30-14-14w, location.




—By Courtesy of Mid-Continent Map Co., Wichita, Kans.

Map of Rice County, showing locations of recently discovered pools and their respective names

### Near Completions

Buffalo Oil Co.'s No. 6 Schaffer-Anschutz, NW SW SW Section 27-13-14w, was acidized in Oswald lime at 2,994-3,040 feet and it swabbed 542 bbls. of oil and 28 bbls. of water in 17 hours. It was deepened to 3,088 feet and the production increased. It was not given a test in deeper pay.

Empire Oil & Refining Co.'s No. 3 Ehrlich, SE cor. Section 28-13-14w, acidized in Siliceous lime at 3,283-3,307 feet, pumped 69 bbls. of oil and 600 bbls. of water in 24 hours.

Gypsy Oil Co.'s No. 1 Ehrlich, SW SW NW Section 1-14-15w, pumped 272 bbls. of oil in 12 hours from Tokio lime at 2,518-23 feet.

Gypsy Oil Co.'s No. 1 Gurney, NW NW SE Section 23-14-14w, drilled into Granite Wash at 3,195-3,230 feet and was plugged back to 3,045 feet and acidized in Oswald lime which was topped at 2,926 feet.

### Graham County

Cusco Oil Co. has rotary rig up for a wildcat test, No. 1 Kaufman, C NE NE Section 18-6-24w, in northern Graham County.

### Harvey County

Selby Oil & Gas Co. was moving in material for No. 2 Sperling, NE SE SE Section 14-22-2w.

### Rush County

Darby Petroleum Co. made a location for a wildcat test, No. 1 Jacobs, SW SW NW Section 3-16-19w.

### Ellis County

Joe Aylward's No. 1 Dreiling, SE cor. Section 3-14-16w, Ellis County, was abandoned at 3,490 feet. It was a wildcat test. It was plugged back to Topeka, where it made a little oil and water. It had nothing in the Oswald lime topped at 3,180 feet. The hole was bottomed in Conglomerate, topped at 3,415 feet.

### Wildcat Failure

Another failure in a wildcat in Ellis County was Stanolind Oil & Gas Co.'s No. 1 Penney-Wann, NW SW SE Section 12-15-20w, which was abandoned at 3,716 feet. It drilled into Granite at 3,711-16 feet. Kansas City lime is recorded at 3,298 feet and Conglomerate at 3,579 feet, but no other key or producing formation has been noted in the weekly reports on the operation.

Tom Palmer and Storm King Oil Co.'s No. 1 Ruder, SE NE NW Section 17-15-18w, had Oswald at 3,243 feet and pay at 3,422-25 feet, total depth. Oil rose 1,400 feet in the hole in eight hours.

### Ellsworth County

Smith, Ash & Gypsy Oil Co.'s No. 2 Shanyo, SE SW SW Section 24-17-10w, Ellsworth County, was completed in Siliceous lime at 3,220-40 feet. It pumped 543 bbls. of oil and salt water in 24 hours, but on its potential test pumped 339 bbls. of oil and 65 bbls. of water.

The Twin Drilling Co. abandoned the location for No. 3 Rolfs, NE NW SW Section 13-17-9w, in the Lorraine Pool for which rig was built last February.

Bradley & Scanlon and others were moving in material for No. 6 Mohney, NW SW SE Section 14-17-9w, and had cellar dug for No. 7 Mohney, SW SW SE Section 14-17-9w. Empire Oil & Refining Co. was moving in material for No. 10 Rolfs, SW NE NE Section 14-17-9w.

In the Lorraine Pool, Bradley & Scanlon's No. 3 Mohney, SW SE SE Section 14-17-9w, pumped 1,208 bbls.

of oil in 16 hours from Siliceous lime at 3,186-95 feet.

### Rice and Barton Counties

John Burton and others' No. 1 Wendel, SW SW NE Section 32-19-10w, Rice County, had Siliceous lime at 3,289-93 feet and made a potential production of 703 bbls. of oil in 21½ hours. It was completed.

Hilligoss and others' No. 5 Isern, NW NE NE Section 12-20-11w, Barton County, produced 1,591 bbls. potentially from Siliceous lime at 3,309-12 feet and was completed.

Shell Petroleum Corp.'s No. 3 McFarland, SE NE NW Section 7-20-9w, Rice County, found Siliceous lime at 3,238 feet, total depth 3,281 feet. It was completed after making 434 bbls. of oil and 10 bbls. of water in 24 hours. Same company's No. 4 McFarland, NE SE NW Section 7-20-9w, was also completed. It had Siliceous lime at 3,274-87 feet, total depth, and produced 1,142 bbls. of oil and 285 bbls. of water in 24 hours.

Empire Oil & Refining Co.'s No. 1 Malone, SW SE NW Section 19-20-9w, which was a failure in Siliceous lime topped at 3,374 feet, was drilled to 3,631 feet and will be used as a water disposal well.

L. E. Douglas and Hutchinson Oil & Gas Co. have moved in material for a wildcat test, No. 1 Hammel, NE NE NE Section 16-19-10w.

Phillips Petroleum Co.'s No. 6 Metzger, NW NW NE Section 21-20-10w, Rice County, had Siliceous lime at 3,351-55 feet, total depth, and oil rose in the hole 2,300 feet in six hours.

Gypsy Oil Co.'s No. 1 Coffman, NW NW SW Section 5-20-9w, swabbed 340 bbls. in 11½ hours from Siliceous lime at 3,238-47 feet, total depth.

Gypsy Oil Co.'s No. 1 Dewitt, SE cor. Section 9-20-9w, had Siliceous lime at 3,230-50 feet, total depth. It swabbed 280 bbls. in 12 hours and was then acidized. Same company's No. 2 Dewitt, NE NE SE Section 9-20-9w, topped Siliceous at 3,237 feet, total depth 3,388 feet, where water was encountered. It was plugged back to 3,271 feet and shot with 40 quarts. The well pumped 320 bbls. in 19 hours and was then acidized.

Magnolia Petroleum Co.'s No. 5 Beyers, NW SW NW Section 21-19-9w, was plugged back to 3,254 feet and pumped 137 bbls. of oil and 440 bbls. of water in 24 hours Siliceous lime was topped at 3,242 feet and the hole had been drilled to 3,256 feet.

### Reno County

National Union Oil Co.'s No. 1 Myers, SE NE NW Section 34-23-4w, in the Burrton Pool in Reno County, had Chat at 3,315 feet, Misener at 3,673 feet and Hunton at 3,676 feet, total depth 3,685 feet, where it got a hole full of water. It was plugged back to 3,387 feet and the casing ripped at 3,382-87 feet and again at 3,350-65 feet. After much testing it was completed as a 20-bbl. initial producer, but it also produced 50 bbls. of water.

Shell Petroleum Corp.'s No. 1 Danton, C NE SE Section 16-24-4w, produced 644 bbls. of oil and 100 bbls. of water from Chat at 3,309-58 feet, acidized. It was completed.

W. C. McBride, Inc., has rotary rig up for No. 1 Dick, SE SW SW Section 36-22-4w, Gypsy Oil Co. was rigging up rotary for No. 4 Meyers, C NE NW Section 3-24-4w.

Olson Oil Co. and Shell Petroleum Corp.'s No. 8 Goering B, C N half N half NW Section 35-23-4w, had Hunton lime at 3,574-95 feet, total depth, and pumped 779 bbls. of oil and 800 bbls. of water in 24 hours. It was not completed.

Duwe and others' No. 1 Mildren, C SW SE Section 24-24-8w, Reno County, pumped 275 bbls. in 24 hours from a pay at 3,530-36 feet, total depth 3,550 feet. It had been acidized with 3,000 gallons and then 6,000 gallons. It was not completed.

### Barber County

The Southern Drilling Co.'s No. 1 Davis, 330 feet from south and 830 feet from east lines of NE ¼ Section 13-34-15w, Barber County, had Viola lime at 5,215 feet with a showing of oil, and 1,500,000 feet of gas and a spray of oil from Mississippi lime at 5,275 feet. It was given a 2,000-gallon acid treatment.

### McPherson County

Sinclair Prairie Oil Co.'s No. 2 Morehouse, NE SE NE Section 4-21-3w, McPherson County, was good for 345 bbls. of oil from Siliceous lime at 3,508-12 feet, but also produced 160 bbls. of water. It was an old well deepened from 3,420 feet.

Shell Petroleum Corp. completed No. 4 Fleming, 330 feet north and 1,332 feet west of C Section 11-19-2w. It made a four-day average of 482 bbls. per day producing from Viola lime at 3,379-92 feet. It had been acidized.

No new work was reported during the week.

Shell Petroleum Corp.'s No. 1 Wenger, NE cor. Section 2-20-1w, which showed production in the Viola lime, was being deepened. It found Wilcox sand at 3,405 feet and was coring at 3,444 feet. This is a wildcat test.

The Shell Petroleum Corp.'s No. 4 Koehn, SE SW NE Section 16-21-3w, pumped 135 bbls. of oil in 18 hours from Wilcox sand at 3,388-3,414 feet. This well has been in since early in July but was not yet completed.

Dickey Oil Co.'s No. 1 Rolander, NW NE SW Section 30-18-2w, Ritz-Canton Field, had 600 feet of oil in the hole from Kansas City lime at 2,310-25 feet, and was given an acid treatment.

Shell Petroleum Corp.'s No. 10 Decker, 1,317 feet from north and 330 feet from west lines of NE ¼ Section 11-19-2w, was acidized in Viola lime at 3,383-96 feet, total depth, and pumped 570 bbls. of oil and 180 bbls. of water the first day and 625 bbls. of oil and 300 bbls. of water the second day. It was not a completion.

### Stafford County

C. B. Davis and others' wildcat well in Stafford County, No. 1 Riley, SE cor. Section 19-22-11w, had Siliceous lime at 3,589-3,606 feet, was plugged back 3 feet and tested. It produced 205 bbls. the first 12 hours and 170 bbls. the second 12 hours and later, on a potential test, produced 185 bbls. of oil in 24 hours, opening a new pool or extending the Richardson pool northwesterly.

Atlantic Oil Producing Co. and Phillips Petroleum Co.'s No. 1 Cornwell, C NE SW Section 4-25-13w, have material moved in for a wildcat rotary test.

### Scott County

Atlantic Oil Producing Co.'s No. 1 Dague, C SW NW Section 14-20-33w, topped Mississippi lime at 4,629 feet and cored a saturated sand at 4,633-44 feet and was rigging up standard tools. This well is in the Shallow Water Pool in Scott County, the most westerly oil pool in the state.

### Morris County

Ryan and others' No. 1 Wiesse, C SE NW Section 9-17-7, Morris County, had Wilcox at 2,168-70 feet which showed only water, bailing 2 bbls. of water per hour.

### Greenwood County

The Markus Oil Co. completed No. 1 Shook, SW SW SE Section 31-23-12, Greenwood County, a 35-bbl. producer from Mississippi lime at 1,864-87 feet. It had been acidized.

Shaffer & Howell's No. 16 Schneider, SW SW NW Section 15-23-13, was completed as a 75-bbl. well from sand at 1,715-19 feet and Mississippi lime at 1,720-35 feet, total depth.

Shull Drilling Co.'s No. 1-A Dewey, 450 feet north and 335 west of SE cor. Section 1-24-13 made a 10-bbl. completion from pay at 1,683-91 feet, which had been acidized.

Mullins and others have machine in for No. 1-A Leedy, SE NE SE Section 26-22-9; Ward McGinnis, machine in for No. 1 Schultz, SE SE SW Section 31-23-12; Houston-Oklahoma Oil Co., drilling at 300 feet in No. 1 Metcalf, NE NE NW Section 34-23-13.

### Clark County

Watchorn Petroleum Co. is cleaning out to deepen No. 1 Stevens, NW NE NW Section 21-32-21w, Clark County, old total depth 4,290 feet.

### Cowley and Sumner Counties

Wakefield's No. 1 Tharp, a wildcat in SE SE NE Section 10-32-3, Cowley County, was a hole full of water at 3,448-65 feet, Siliceous lime, and was abandoned. Same operator was drilling at 300 feet in No. 1 Auman, SE SE NE Section 32-33-3, a wildcat.

Sinclair Prairie Oil Co.'s No. 3 Kamis, SW NW SW Section 28-31-1w, Sumner County, swabbed 45 bbls. in eight hours from Chat topped at 3,652 feet, total depth 3,695 feet.

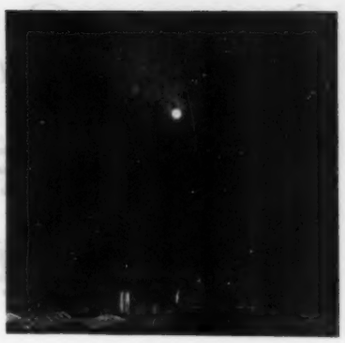
Lloyd, Frost & Study's No. 1 Weathered, a wildcat, SW SE SE Section 28-31-3, Cowley County, pumped 550 bbls. of oil and 70 bbls. of water. It produces from Siliceous lime topped at 3,339 feet, total depth 3,405 feet, where the hole filled with water. It was plugged back to 3,349 feet. It was not completed.

Amerada Petroleum Corp. and Sunray Oil Co.'s Simpson sand gusher in the Oxford City Pool was the sensation of the week in Kansas. The well is located in SW SE SW Section 14-32-2. It had Simpson dolomite at 2,820-86 feet and flowed 2,421 bbls. in 18 hours while drilling in, producing 252 bbls. in the last hour, or at the rate of 6,048 bbls. per day. It was the third Simpson dolomite producer in the pool this year, Barnsdall Oil Co. and Shell Petroleum Corp. each having completed one in that formation, but neither of them very large wells.

The Shell Petroleum Corp.'s No. 3 Barnes, 660 feet north and 1,100 feet east of SW cor. Section 14-32-2, had Simpson dolomite at 2,871 feet, total depth 2,880 feet, and was showing 2 bbls. of oil per hour.

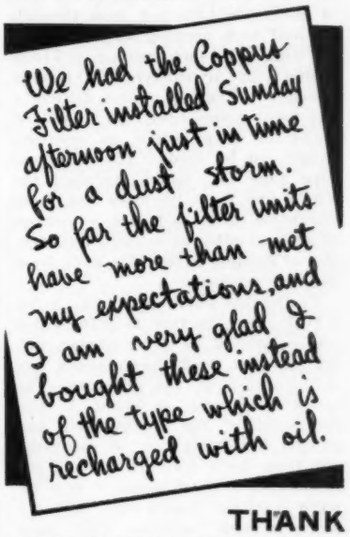
---

Mark S. Patton, owner of the Hurley Gasoline Sales Company Tulsa, accompanied by MRS. PATTON, started last Saturday on a three weeks' motor trip without a definite itinerary, but planning to spend most of their time at various points in Colorado.

FROM THE HEART OF THE DUST STORM AREA

*a city manager wrote us—*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REMEMBER—it's the smallest dust that's the worst

2048

## North Louisiana, Arkansas

# RODESSA DISCOVERY FLOWS AT RATE OF 150 BBLS. HOURLY

By J. R. CRUMPTON

SHREVEPORT, La., Aug. 5.—The first oil was piped from United Gas Public Service Co.'s No. 1 I. L. Young, Section 21-23-16, the discovery well of the Rodessa Field, in the northwestern part of Caddo Parish, during the week. Although not officially completed, the well is flowing at the rate of about 150 bbls. per hour through one-half inch opening on 2-inch casing wing and 1-inch opening on 2-inch tubing wing. It registers 2,000 pounds pressure on casing. Some difficulty has been encountered, and it will be about 10 days before an accurate gauge can be made. The Standard Pipe Line Co., which installed the 8-inch line from its main line from Oklahoma to Baton Rouge, a distance of about 8 miles, announced its intention of running 10,000 bbls. daily from the new producer.

United Gas Public Service Co.'s No. 1 D. F. Barr, Section 29-23-16, which was completed as a big gasser during the past week, has delayed any definite idea of the oil area. The latest completion is about 1 mile southwest of the Young well and gauged 58,000,000 feet of saturated gas from 6,052 feet. It extends gas production a short distance west toward the Cass County line. About a score of new locations have been staked, practically all of them concentrated around the discovery well in the Rodessa townsite.

The next test to be watched is Haynes Production Co.'s No. 1 Tyson, Section 24-23-16, 2½ miles east of the discovery well, which is drilling below 5,000 feet. The test is below the red beds in the lower Cretaceous and is reported to have logged the base of red beds at subsea depth of 4,607.8 feet, the elevation being 222.2 feet.

Other wells that have spudded in in Rodessa follow: Pelican Oil & Gasoline Co.'s No. 1 Sexton, Section 14-23-16, set 13⅜-inch casing at 580 feet and drilling at 617 feet; United Gas Public Service Co.'s No. 1 Thomas, Section 23-23-16, set 16-inch at 705 feet and drilling at 1,550 feet; Arkansas-Louisiana Gas Co.'s No. 1 J. S. Teamer, Section 13-23-16, set 13⅜-inch surface at 278 feet; Haynes Production Co.'s No. 1 W. B. Lawton, Section 14-23-16, set 12½-inch at 219 feet and 9⅝-inch at 2,075 feet. R. W. Norton, discoverer of the gas field, is rigging up on his No. 1 Caddo Levee Board in Section 21-23-16.

### Trend of Play

As stated last week, the play in the Rodessa area is southwest into Cass, Marion and Harrison Counties in East Texas and to the northeast into Miller County, Arkansas. The hottest play seems to be to the southwest into Cass County and north of the fault line in Caddo Parish in the vicinity of the discovery well. A deep test in Harrison County, northeast of Marshall, is holding the center of attention in that area. Itex Oil Co.'s No. 1 T. J. Taylor, W. H. Payne Survey, is drilling at 5,200 feet.

Area in which Hunter Co.'s No. 1 DeSoto gas well was found in Section 29-12-14

Caldwell Parish reports two new wildcats in the making. Caldwell Drilling Co., Inc., is rigging up on its No. 1 Luna Gore in Section 3-12-3e, and Critchett & Woods have staked location for No. 1 Kyles in Section 18-11-3e. The latter is in the vicinity of the same operators' No. 1 Kraft, which was abandoned in salt water sand last week at 1,935 feet.

### DeSoto Parish

DeSoto Parish furnished the most important development outside of the Rodessa area. Hunter Co.'s No. 1 DeSoto Corp., Section 29-12-14, 7 miles northwest of Mansfield, blew in as a good gasser, gauging 16,356,000 feet of dry gas with 1,105 pounds rock pressure in 45 minutes' flow. The gas sand was topped at 2,811 feet, 7-inch casing was set at 2,797 feet with the hole bottomed at 2,847 feet. The well is the second gasser on a block of about 7,000 acres and has been temporarily shut in pending some outlet for the gas. On the northern flank of the Holly Field, DeSoto Parish, C. T. Ruffin's No. 1 Lee, Section 33-14-13, was completed pumping 20 bbls. from 2,842 feet.

### Wildcat Tests

There are four or five other wildcat operations in widely separated areas of North Louisiana that will be closely watched for the next month. E. T. Oakes' No. 1 Patton estate, Section 1-20-5, Claiborne Parish, is making good progress, coring in gray shale at 2,035 feet. The test is about 7 miles northeast of the Sugar Creek gas field and 3½ miles south of a test drilled below 6,000 feet by United Gas Public Service Co. about two years ago. The latter test has been making about 6 bbls. of oil from around casing for the past year. Although the Oakes test is expected to go to the upper Trinity, a thorough test will be made of all formations, including the Blossom and Woodbine. On the Grambling structure in Lincoln Parish, Herman L. Brown's No. 1 Monstead, Section 10-17-4w, has spudded in and drilling at 250 feet. This will be another deep well if the upper sands fail to pay off.

## ARKANSAS

Aside from assembling wildcat blocks for some deep tests in Lafayette, Miller and Ouachita Counties, this district had very little activity during the week. Joe Modisett of El Dorado has staked location for No. 1 Red River Lumber Co. in Section 21-19-24, Lafayette County. This test is reported to have a contract depth of 7,000 feet. This county will have at least four deep wells drilling at an early date. J. K. Wadley and A. E. Erwin of Texarkana have a block of about 6,000 acres in Township 16s, Range 23w, and plan a 6,000-foot test. It is in the vicinity of a test drilled to 5,000 feet in Section 19-16-23, about a year ago. Southwest of the town of Lewisville, Earl F. Fox is rigging up on his No. 2 Coleman Brothers in Section 30-16-24. This will be a Tokio-Woodbine test from which a good show was encountered in a well drilled about 1½ miles to the southwest two years ago.

Benedum & Trees are reported to be planning a deep test on a large block of acreage in the southwestern part of Ouachita County. It will be north of the shallow Stephens Field, centering around Township 14, Ranges 18 and 19. King Oil Corp. of Texarkana which drilled two wildcats northwest of the Miller County Field, announces the assembly of a 5,000-acre block about 4 miles southwest of the field, the depth to be to around the 3,100-foot level or to the pay horizon of the limited field east of Texarkana.

Gulf Refining Co.'s No. 49 L. Werner, Section 5-16-16, in the Smackover area of Union County, is coring hard red beds and streaks of lime at 7,792 feet. In Poinsett County, Rockwell Development Co.'s No. 1 W. A. Smith, Section 13-11-3e, is drilling in gumbo at 573 feet. A Calhoun County wildcat, Hunter Co.'s No. 1 Stout Lumber Co., Section 33-16-13, is rigging up to drill a 3,500-foot test on a block of approximately 5,000 acres.

### Daily Production

Estimated daily gross production all companies week ending August 2, 1935:

**NORTH LOUISIANA**

| | |
|---|---|
| Bellevue | 600 |
| Caddo light | 7,415 |
| Caddo heavy | 1,910 |
| Converse | 1,100 |
| Cotton Valley | 410 |
| De Soto and Red River | 1,415 |
| Elm Grove | 450 |
| Haynesville | 3,465 |
| Holly | 160 |
| Homer | 2,685 |
| Pleasant Hill | 160 |
| Sarepta-Carterville | 530 |
| Urania | 2,950 |
| Zwolle | 1,540 |
| Total | 24,790 |

**SOUTH ARKANSAS**

| | |
|---|---|
| Champagnolle | 2,315 |
| El Dorado | 2,255 |
| Lisbon | 320 |
| Miller County | 1,485 |
| Nevada | 865 |
| Smackover light | 2,290 |
| Smackover heavy | 18,115 |
| Stephens | 635 |
| Urbana | 2,100 |
| Total | 30,360 |

# Oklahoma Operations

By JAMES McINTYRE

# McLISH SANDS IN FITTS POOL SHOW BIG OIL PRODUCTION

The reduction in the allowable production of Oklahoma in August, the assurance that there is a rich store of oil in the McLish sands in a part, at least, of the Fitts Pool in Pontotoc County, the discovery of which was only recently made, and the new pool opened in the Stillwater area in Payne County are the current outstanding features in oil in the State.

The Amerada Petroleum Corp. and Stanolind Oil & Gas Co.'s No. 1 Friedman, SE cor. Section 28-17-3, Payne County, was shut down for pipe line connection after it had made two days' production of 660 bbls. and 560 bbls. of oil and about 1 per cent water which is reported to have had a salty taste. It had Simpson Dolomite at 4,289 feet and sand at 4,301-05 feet, total depth. The well is in an incomplete stage and has not yet had a real test of what it can produce. The accompanying map shows the acreage ownership around the well.

### August Allowable

The Oklahoma Corporation Commission fixed the August allowable production of Oklahoma at 491,194 bbls., a reduction of 26,206 bbls. per day from the July allowable. The production for the week ending August 3 was 498,775 bbls. per day or 25,175 bbls. less than the daily average for the preceding week.

The action of the commission was in response to a petition of Oklahoma operators. The production cut was considerably lower than that recommended by government agencies which was 5,400 bbls. per day.

The allowables by pool is as follows:

| | |
|---|---|
| Oklahoma City: | |
| Wilcox and Fault Line | 121,490 |
| Class B, Simpson zone | 19,205 |
| Cleveland sand | 2,200 |
| Simpson above Wilcox | 100 |
| Total | 142,995 |
| East Little River | 834 |
| Little River | 13,618 |
| Earlsboro et al | 15,845 |
| Mission | 2,926 |
| Searight | 2,699 |
| East Seminole | 1,276 |
| Maud | 1,046 |
| Asher-Wanette | 845 |
| Konawa | 1,845 |
| Sasakwa | 750 |
| Allen | 6,338 |
| Tatums | 4,667 |
| Seminole City | 11,425 |
| Seminole proper et al | 17,610 |
| St. Louis | 23,125 |
| Sasakwa townsite | 1,575 |
| Fish (Cromwell sand) | 4,625 |
| Crescent | 4,625 |
| Edmond | 3,930 |
| Fitts (Bromide sand) | 16,420 |
| Fish (Wilcox sand) | 4,165 |
| Keokuk Falls | 1,575 |
| Lucien | 9,250 |
| Polo | 3,240 |
| Geasman | 740 |
| Grayson | 800 |

The voluntarily prorated fields were given an allowable of 24,605 bbls. The Class D, or wildcat wells, were allotted 5,900 bbls. daily. The areas and quotas follow:

| | |
|---|---|
| Altus | 700 |
| Britton | 200 |
| West Chandler (Hoyt) | 100 |
| Dill | 600 |
| East Lucien (Misener) | 100 |
| East Lucien (Viola) | 100 |
| Fish | 200 |
| Grisso | 300 |
| South Keokuk Falls | 300 |
| Langston | 300 |
| South Langston | 100 |
| Lynch | 100 |
| Marathon | 100 |
| Olympic | 200 |
| North Searight | 1,100 |
| Shawnee | 400 |
| Seward | 100 |
| Wilzetta | 500 |
| Wofford | 300 |

Allocation of stripper wells, which flow to capacity, was 162,000 bbls.

### New Cleveland County Test

Northeastern Cleveland County is to have another deep test on a communitized block. The Stanolind Oil & Gas Co., Amerada Petroleum Co. and Asa Lee Mays have made a location for No. 1 Parsons, SW cor. SE Section 30-9-1e. Other owners in the block are Phillips Petroleum Co., Gypsy Oil Co., Texas Co., Magnolia Petroleum Co. and M. K. Owenby. Asa Lee Mays, Inc., drilling contractor, will drill the first test.

### Fitts Pool Completions

Magnolia Petroleum Co.'s No. 6 Schaffer, NW SE NW Section 25-2-6, Fitts Pool, Pontotoc County, had Bromide at 4,220 feet, first sand at 4,320 feet, second sand at 4,395-4,400 feet, total depth, flowed 779 bbls. in three hours while tubing was being run.

Delaney and others' No. 2 Smith, 330 feet north and 490 feet west of SE cor. Section 26-2-6, had Bromide at 4,140 feet, sands at 4,205 and 4,295 feet, McLish at 4,330-34 feet, total depth. It flowed 771 bbls. the first hour through casing and 199 bbls. the second hour through tubing.

Moore and others' No. 8 Craddock, SE SW SW Section 29-2-7, had Bromide at 3,835 feet, sands at 3,935 and 4,005 feet, McLish at 4,040-41 feet, total depth. It was given a potential rating of 1,322 bbls. per day. Completed. Moore and others' No. 3 Patrick, SW NW NE Section 31-2-7, had Bromide at 3,880 feet, sands at 3,985 and 4,025 feet, McLish at 4,097-4,105 feet, total depth. It was rated potentially at 1,569 bbls. per day.

Moore and others' No. 7 Smith, SW NE NW Section 31-2-7, had Bromide at 3,945 feet, first sand at 4,060 feet, second not determined, McLish at 4,160 to 4,402 feet with sands at 4,267-85 feet and 4,345-95 feet. It was given a potential rating of 4,118 bbls. The production came from both Bromide and McLish sands. Moore and others' No. 8 Smith, SE NE NW Section 31-2n-7e, was also a Bromide and McLish producer completed at 4,403 feet, still in McLish. It had Bromide at 3,939 feet, sands at 4,025 and 4,105 feet, McLish at 4,142 to 4,403 feet, total depth. Its best hour's production reported was 197 bbls. at 4,403 feet.

Moore and others having gained permission from the Corporation Commission to deepen No. 3 Atkins, SW NW NW Section 32-2-7, drilled down to a new horizon locally called the Burgen sand at 4,405-75 feet and the well which had been good for 187 bbls. per hour increased to 808 bbls. per hour. This is the ninth producing sand in the Fitts area: Cromwell, McAlester, Hunton, Viola, first and second Bromide, and first and second McLish sands have been found productive of either oil or gas, or both, in different parts of the general Fitts area. Early in the development of the field the Bromide sands were called first and second Wilcox, but later it was believed the Wilcox sands would be found at a deeper horizon and now some geologists are of the opinion that the Burgen sand is the true Wilcox. The discovery of deeper pays than the Bromide sands gives the field a new aspect. It is expected to produce vastly more oil than first estimated and there are enthusiasts who estimate the field's production as high as 100,000 bbls. per acre.

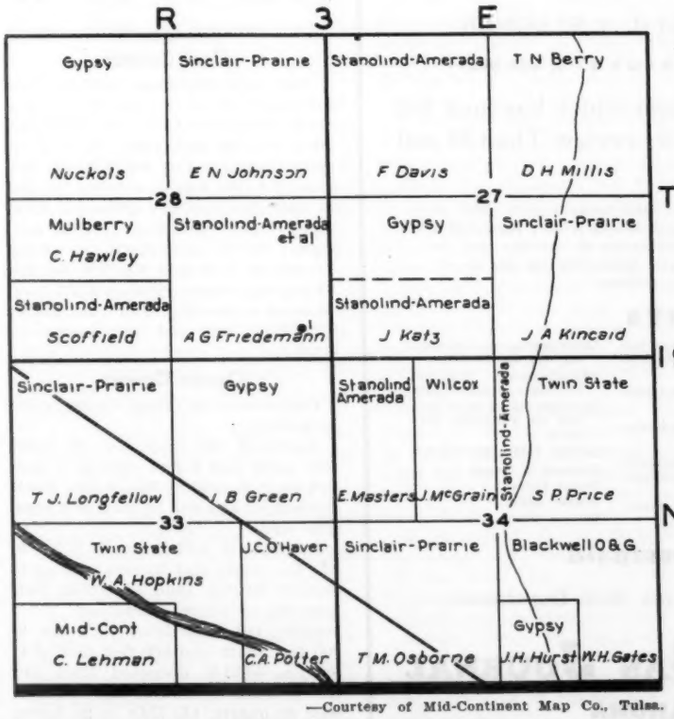
The Phillips Petroleum Co.'s No. 4 T. Norris, SE SE SW Section 25-2-6, was completed. It flowed 1,125 bbls. of oil in three and one-half hours through casing and 242 bbls. in one and one-half hours through tubing and it was given a potential rating of 5,030 bbls. per day. It had been drilled to 4,418 feet, plugged back to 2,700 feet and redrilled to 4,092 feet. At 4,087 feet it was found to be 17 degrees from vertical.

Outside the Fish Pool in Pontotoc County two completions were reported: Fleetborn Drilling Co.'s No. 2 Oliver (twin), 280 feet south and 1,040 feet east of C Section 21-4-5, was dry and abandoned at 1,140 feet, and Southern Oil Co.'s No. 1 Walker, NW NW SW Section 11-4-6, is a 20-bbl. well at 1,160-69 feet, total depth, drilled 1,530 feet and plugged back to 1,178 feet and shot.

A corrected location puts Amerada Petroleum Corp.'s No. 2 Norris, 1,076 feet west and 330 feet north of SE cor. Section 26-2-6. McBride and others have rig up for No. 1 Brentz, SE NE SW Section 4-1n-6e, in Pontotoc County, southwest of the Fitts Pool. Skelly Oil Co. made a location for No. 1 G. Smith, NE NE NE Section 35-2-6. Bishop Oil Co. has revived the location for No. 1 Simpson, NW SW NW Section 28-2-7. Clark & Cowden's No. 1 Summers, NW NE SW Section 17-2-7, is a corrected location.

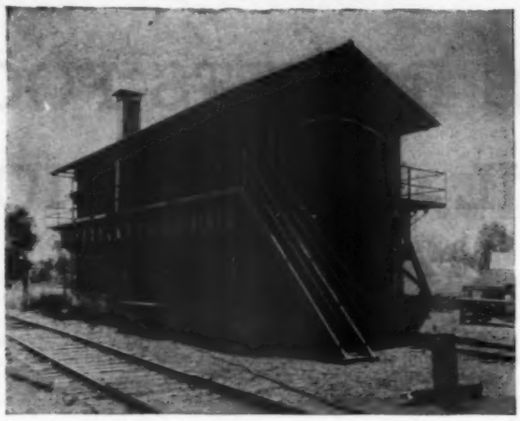
### Near Completions

Stanolind Oil & Gas Co.'s No. 2 Norris, SE SW SE Section 25-2-6, Fitts Pool, which was plugged back from 4,315 feet to 4,255 feet and redrilled to 4,275 feet, where it had a hole full of sulphur water, and again plugged back to 4,258 feet, was treated with 1,000 gallons of acid and




—Courtesy of Mid-Continent Map Co., Tulsa.

Lease ownership around discovery well in new pool southeast of Stillwater, Payne County, Oklahoma



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a 25-bbl. oil load. When opened it flowed 20 bbls. of oil gross in 16 hours. It was to be given a swabbing test.

Burke-Greis Oil Co. and others' No. 2 Chambers, NW NE NW Section 36-2-6, had Bromide at 4,255 feet, first sand at 4,355 feet, total depth 4,393 feet. It flowed 60 bbls. in one hour through tubing.

Moore and others' No. 1-A Harper, SW SW NE Section 29-2-7, had Bromide at 4,035 feet and sands at 4,135 and 4,235 feet and McLish at 4,245-81 feet, total depth. The well flowed 210 bbls. in one hour.

### Oklahoma Production

Estimated daily average production of Oklahoma for the week ending August 3 and for the preceding week is as follows:

| | Barrels | |
|---|---|---|
| | Aug. 3 | July 27 |
| Allen | 7,825 | 7,800 |
| Asher-West Asher | 1,275 | 1,300 |
| Burbank | 8,500 | 8,500 |
| South Burbank | 11,250 | 11,250 |
| Balance Osage | 26,750 | 26,750 |
| Blackwell | 4,775 | 4,775 |
| Bristow-Slick | 9,150 | 9,150 |
| Chandler | 4,575 | 4,600 |
| Crescent | 6,150 | 3,650 |
| Cromwell | 4,325 | 4,325 |
| Cushing-Shamrock | 13,500 | 13,500 |
| Duncan district | 4,200 | 4,200 |
| Edmond | 3,750 | 4,750 |
| Fish | 9,300 | 10,125 |
| Fitts | 24,450 | 25,525 |
| Gray | 1,675 | 1,875 |
| Graham | 4,250 | 4,250 |
| Healdton | 9,600 | 9,600 |
| Hewitt | 4,825 | 4,825 |
| Holdenville | 1,550 | 1,525 |
| Keokuk | 1,825 | 2,050 |
| Konawa | 1,800 | 1,875 |
| Lucien | 10,250 | 12,000 |
| Marshall-Lovell | 1,050 | 1,050 |
| Oklahoma City | 136,850 | 152,325 |
| Papoose | 1,200 | 1,200 |
| Polo | 3,325 | 3,850 |
| Sasakwa and townsite | 2,450 | 2,425 |
| Sholem Alechem | 4,025 | 4,025 |
| Seminole Field: | | |
| Bowlegs | 9,450 | 11,375 |
| Carr City | 4,950 | 6,150 |
| Earlsboro | 9,775 | 10,150 |
| East Earlsboro | 10,350 | 10,925 |
| South Earlsboro | 1,175 | 1,225 |
| Little River | 14,900 | 14,525 |
| East Little River | 850 | 950 |
| Maud | 1,050 | 1,100 |
| Mission | 3,275 | 3,250 |
| Seminole | 11,975 | 12,225 |
| East Seminole | 1,450 | 1,575 |
| Searight | 3,725 | 4,500 |
| Total Seminole | 72,925 | 77,950 |
| St. Louis-Pearson | 24,575 | 26,075 |
| Tatums | 4,775 | 4,800 |
| Tonkawa-Garber-Thomas | 5,750 | 5,750 |
| Wewoka | 3,550 | 3,550 |
| Yale-Jennings | 5,100 | 5,100 |
| Other pools | 57,650 | 57,650 |
| Total Oklahoma | 498,775 | 523,950 |

### Coal County

Two very important wildcat tests are being drilled in Coal County. Amerada Petroleum Corp. and Stanolind Oil & Gas Co. and others' No. 1 Travelers Insurance Co., SW NW SE Section 28-1s-9e, had a showing of gas at 4,597 feet and was drilling at 4,646 feet. It had Viola lime at 4,467 feet. Carter Oil Co. and others' No. 1 John Thompson, C S half NE NW Section 34-2-9, had sandy lime at 4,335 feet. It cored a showing of oil and gas at 4,340-41½ feet and was coring at 4,350 feet.

### Osage County

Completions in Osage County were as follows:

Barnsdall Oil Co.'s No. 19, 1,005 feet north and 5 feet west of C Section 30-21-9, sand at 365-74 feet, small show of oil and will be used as a pressure well.

Johnson Oil & Refining Co.'s No. 9, 736 feet south and 58 feet west of C Section 30-21-9, sand at 302-50 feet, hole full of water, abandoned.

Johnson Oil & Refining Co.'s No. 2, 300 feet south and 660 feet east of C Section 30-21-9, deepened from 346 feet to Burgess sand at 2,317-28 feet, shot 30 quarts, 140 bbls. in 24 hours.

Gypsy Oil Co. and Continental Oil Co.'s No. 3, NW SE NW Section 12-23-7, Bartlesville sand at 2,844-2,907 feet, pumped 40 bbls.

A. H. Simon's No. 1-A, NE SW SW Section 28-24-8, Wilcox sand at 2,551-58 feet, flowed 150 bbls. first hour, pinched down to 200 bbls. a day.

Sinclair Prairie Oil Co.'s No. 3, Tract 140, South Burbank, SE NE SE Section 9-25-6, had Burbank sand at 2,812-53 feet, flowed 510 bbls. in six hours. Same company's No. 4, Tract 140, NW NE SE Section 9-25-6, Burbank sand at 2,800-36 feet, flowed 863 bbls. of oil in five hours.

Carter Oil Co.'s No. 8 Bean, NW SW NW Section 15-25-6, Bartlesville sand at 2,825-56 feet, swabbed and flowed 87 bbls. in 24 hours. Shot with 70 quarts it responded with 159 bbls. of oil in 24 hours.

Coralena Oil Co.'s No. 10, near C NE NW SW Section 15-25-6, Bartlesville sand at 2,778-2,817 feet, shot with 65 quarts, swabbed 90 bbls. in 24 hours.

Sinclair Prairie Oil Co.'s No. 3, SE NE NE Section 16-25-6, Bartlesville sand at 2,825-61 feet, flowed 40 bbls. per hour.

Barnsdall Oil Co.'s No. 4, SE cor. NE Section 35-25-11, Bartlesville sand at 1,662-1,727 feet, shot with 20 quarts at 1,720-24 feet, swabbed 17 bbls. in 12 hours.

Enterprise Transit Co.'s No. 3 Mosier, SE NE NE Section 34-26-6, Bartlesville sand at 2,867 feet, first oil at 2,888 feet, total depth 2,953 feet, initial production 2,413 bbls. Same company's No. 2 Williams, SE NW NW Section 35-26-6, Burbank sand at 2,866-2,930 feet, shot with 100 quarts at 2,897-2,920 feet, flowed 1,138 bbls. in 24 hours.

New work in the Osage Nation includes Norbla Oil Co.'s No. 1, NW SW SW Section 4-20-10, location; Continental Oil Co.'s No. 1, SE SE SE Section 15-24-7, drilling at 320 feet; Sinclair Prairie Oil Co.'s No. 6, SE NW NW Section 15-24-7, rigged up and shut down. Continental Oil Co.'s No. 9, SW NE SE Section 21-24-7, building rotary rig; Barnsdall Oil Co.'s No. 2, NE NW NE Section 23-24-10, cleaning out to deepen from 1,848 feet; Enterprise Transit Co.'s No. 4, NW NE NW Section 35-26-6, cellar and pits; same company's No. 5, NE NW NW Section 35-26-6, cellar, pits.

### Greater Seminole

Watchorn Petroleum Co. and Ross' No. 1 Krouch, SE NE NE Section 4-7-4, Pottawatomie County, was dry and abandoned at 4,117 feet.

Champlin Refining Co. completed No. 9 See, 980 feet from east and 220 feet from north lines of SE ¼ Section 30-7-8 in the Fish Pool, Seminole County. It flowed 275 bbls. net in six hours following an acid treatment in Dolomite and Wilcox sands, total depth 4,171 feet.

Empire Oil & Refining Co.'s No. 1 Davis B, an old well deepened, was completed in Simpson dolomite, total depth 4,138 feet. It flowed 145 bbls. net in six hours, after an acid treatment. Dolomite was topped at 4,060 feet. Old total depth was 3,054 feet.

Magnolia Petroleum Co.'s No. 11 Reed, 1,145 feet north and 280 feet west of SE cor. Section 30-7-8, is a Wapanucka sand completion. It had the sand at 3,045 feet, total depth 3,096 and flowed 531 bbls. in 48 hours.

The Texas Co.'s No. 7 Mayhue, NW NE NW Section 14-9-6, Seminole area, had Hunton lime at 3,853 feet, total depth 3,904 feet. It was acidized, with an oil load added. The well

pumped 215 bbls. net oil in three days, and was completed.

In the Olympic Pool, Seminole County, Olympic Oil Co.'s No. 1 Dixon, NE SW NW Section 12-9-8, is a Calvin sand completion. It had been drilled to 4,279 feet, 2 feet in Wilcox sand, where it found only a small showing of oil and water. It was plugged back to Misener and then to Calvin sand at 1,685-1,735 feet and shot. It flowed 150 bbls. in 18 hours on its completion test. The well also made 12,000,000 feet of gas per day.

New work in the Greater Seminole area includes Gypsy Oil Co.'s No. 1 Doser, SE SW NE Section 14-6-5, Seminole County, building rig; Mid-Continent Petroleum Corp.'s No. 4 Gassoway, NW SE NE Section 14-6-5, cellar and pits; Tom Phillips and others' No. 1 Harjo, NW NW SW Section 34-8-7, Seminole County, cellar and pits; Potco Oil Co.'s No. 1-A Dixon, SW NE NW Section 12-9-8, Seminole County, deepening from 1,490 feet, drilling at 1,640 feet; Carter Oil Co.'s No. 1 Lucas, C W half SE SW Section 14-10-6, South Keokuk Pool, location; Carter Oil Co.'s No. 1 Parsons, C E half NW SW Section 14-10-6, location; Magnolia Petroleum Co.'s No. 1 Andrew, C E half NE NW Section 14-10-6, location.

Mid-Continent Petroleum Corp.'s No. 3 Gassoway, SW SE NE Section 14-6-5, Seminole County, was treated with acid in Dolomite at 3,771-3,816 feet. It pumped 420 bbls. of oil and 100 bbls. of water in 24 hours. Previous to being acidized it swabbed 350 bbls. of oil in eight hours.

Paul Traugh and others' wildcat, No. 1-A Lowry, NE SE NE Section 30-6-5, flowed 45 bbls. of oil in one hour and 65 bbls. in a second one-hour flow producing from sand at 2,446-61 feet. The crew was cleaning out.

Atlantic Oil Producing Co.'s No. 1 Patterson, SW SW NE Section 8-6-7, had no Misener sand; found Dolomite at 3,948 feet and Wilcox at 3,949-65 feet. It flowed 405 bbls. in 24 hours. Drilled deeper, it penetrated Dolomite at 3,965-66 feet and Green Shale at 3,966-67 feet, total depth. It flowed 325 bbls. in 24 hours and 200 bbls. in eight hours the day following.

Martin & Phillips' No. 1 Thomas, SE SW NE Section 8-6-7, had Wilcox sand at 4,075-81 feet, with a showing of oil and casing was being run.

Champlin Refining Co.'s No. 8 See, 990 feet south and 1,170 feet east of C Section 30-7-8, in the Wilcox sand area in the Fish Pool, had Wilcox at 4,147-4,203 feet with no showing and second Wilcox at 4,251-53 feet, total depth, where 3,700 feet of water rose in the hole. It was to be plugged back to first Dolomite.

Wynona Oil Co. and Jarvis & Holm's No. 1 Myers, SE SW NE Section 31-7-8, deepened from Dolomite at 4,214 feet to Wilcox sand at 4,220-21 feet, where it ran into water, made a pumping test and pumped 20 bbls. of water per hour. It is shut down.

Carter Oil Co. and Shell Petroleum Corp.'s No. 1 Brown C-41, C W half SE SW Section 23-8-5, Seminole County, after being plugged back from 4,420 to 4,185 feet to test Hunton lime, was acidized and swabbed dry. Operation was shut down.

### Oklahoma County

Carter Oil Co. made location for No. 1 Price, SE SW NW Section 30-14-3w, in the Edmond Pool, Oklahoma County.

Westgate Oil Co.'s No. 9 Carey, 172 feet from the north and 621 feet from east lines of SE ¼ Section 34-12-3w, Oklahoma City Field, made 30,000,000 feet of gas in 24 hours through 3-inch choke, but no oil, total depth 6,401 feet.

American Oil & Refining Co.'s No. 4 Washington Park, SW cor. NW NW SW Section 33-12-3w, produced 216 bbls. of oil and 15,000,000 feet of gas from Wilcox sand topped at 6,240 feet, total depth 6,356 feet, shot with 100 quarts at 6,261-6,341 feet. It was not completed.

In the Edmond Pool area, Amerada Petroleum Corp. and Stanolind Oil & Gas Co.'s No. 3 Suenram, SE NE NE Section 6-13-3w, had Wilcox sands at 6,560 feet and 6,673 feet and was drilling at 6,692 feet.

Slick-Urschel, Inc.'s No. 2 Suenram, NW NW NE Section 6-13-3w, had first Wilcox sand at 6,574 feet and Conglomerate at 6,580 feet and was drilling at 6,634 geet.

Between the Edmond Pool and the Britton area, Sinclair Prairie Oil Co. decided to kill the production and run a Schlumberger test in No. 1 Corbett, NE NW NE Section 17-13-3w.

### Okfuskee County

Mid-Continent Petroleum Co. was drilling at 3,650 feet in No. 2 Wagner, SW SW NW Section 10-13-6, Okfuskee County.

### Logan County

Shell Petroleum Corp. will plug back to test Layton sand in No. 1 Freelove, SW SW SW Section 17-19-4w, in the Marshall Pool, Logan County, old total depth 6,117 feet, and likewise in No. 4 Sebranek, SW SE NE Section 30-19-4w, old total depth 6,086 feet.

### Pawnee County

Victor H. Martin and others have machine in for No. 1-A Houston, NE NE NE Section 10-20-6.

### Kay County

Lewis Production was moving in material for No. 1 Hollenbeck, SE NE SE Section 18-27-2, Kay County.

### Creek County

Completions in Creek County included the following wells:

Kirschner & Jordan's No. 1-A Yarborough, SW cor. Section 7-14-7, pay at 2,333-63 feet, 10 bbls.

Singer Pipe & Supply Co.'s No. 6 Wilson, C N half NE SW SE Section 11-17-8, sand 1,483-1,520 feet, 10 bbls.

R. R. Kirschner's No. 3 Johnson, NW SE SE Section 14-17-8, sand at 2,763-81 feet, 60 bbls.

Sinclair Prairie Oil Co.'s No. 5 Powell, NE cor. SE Section 17-18-7, deepened from 2,577 feet to 2,733 feet, dry and abandoned.

C. O. Buckles' No. 1 Buckles, SW NW NE Section 22-18-8, sand 2,586-2,632 feet, 50 bbls.

J. E. Crosbie's No. 3 Lacey, NE cor. NW Section 22-18-8, sand at 2,630-69 feet, 125 bbls.

Hilvie Stout's No. 2-A P. Land, CWL SW SW Section 1-18-11, sand at 1,450-68 feet, 20 bbls.

Tool Creek Oil Co.'s No. 2 Smith, NE SE NE Section 11-18-11, sand at 1,586-1,600 feet, 25 bbls.

Riverland Oil Co. and others' No. 7 Landman, CSL NE NW Section 13-18-11, Wilcox sand at 2,109 feet, hole full of water, drilled to 2,306 feet and abandoned.

All the oil wells listed above were given shots of nitroglycerin.

New work in the county included Sidwell's No. 1-A McGilbray, SW NW NE Section 30-14-8, rigging up to deepen from 3,574 feet; Emmett Adams' No. 2 Helton, SW NW NE Section 12-17-8, a machine; Curtis Oil Co.'s No. 1-A Kiefer, C SW NE Section 30-17-12, rigging up; Sinclair Prairie Oil Co.'s No. 47 Rector, C W half NW SE Section 6-18-7, rigged up to deepen; Stout & Helvie's No. 3-A Land, CSL SE SE Section 2-18-11, drilling below 3,384 feet.

### Okmulgee District

Completions in the Okmulgee area include the following wells:

Campbell and others' No. 34 Smith, C W half SE NE Section 27-14-13, sand at 1,950-67 feet, shot with 20 quarts, 25 bbls.

Lease Investors Co.'s No. 1 Taylor, SE SE SE Section 28-15-11, Wilcox sand at 2,832-49 feet, 83 bbls. of oil and 1,000,000 feet of gas.

F. D. Misener's No. 7 Simpson, NE NW SE Section 10-15-14, sand 906-24 feet, 5 bbls.

Paraffin Oil Co.'s No. 6 McFann, SE SW SW Section 26-16-11, dry and abandoned at 2,347 feet.

The above wells were all in Okmulgee County, and the new work in that county includes F. E. Cusack's No. 1-A Proctor, CSL SW Section 20-12-13, drilling at 730 feet; Penrod & Thompson's No. 1-A Doyle, CEL SE NE SW Section 15-13-14, drilling at 675 feet; F. D. Misener's No. 6 Carter, CNL NE SE Section 10-15-14, rigging up; Lincoln Oil Co.'s No. 1-A Roberts, SE cor. NW NE SW Section 29-15-14, location; C. O. Klingensmith's No. 10 Grayson, CNL SE NW Section 35-16-11, rigging up .

In Muskogee County, Bryan Petroleum Co.'s No. 3 Simmons, NE SE SE Section 4-15-15, had Wilcox sand at 1,604-22 feet and started at 20 bbls.

In Wagoner County, Keener Oil & Gas Co.'s No. 1 Childers, SE NW SW Section 16-17-15, had Siliceous lime at 1,955-71 feet and started at 15 bbls. a day.

### Southern Completions

Gypsy Oil Co. completed No. 3 Kelly, NW NE NE Section 10-1n-20w, in Jackson County. It is estimated to be good for 20 bbls. initially from Granite Wash at 1,410-36 feet.

Western Oil, Inc.'s No. 2 Stover, SW cor. NW SW Section 16-1n-8w, Stephens County, was dry and abandoned at 2,498 feet. It had sands at 2,359-62 feet and sandy lime at 2,493-98 feet, neither of which showed oil.

J. C. Bussey's No. 1 Mauldin, NE NE NE Section 20-1n-3w, Carter County, was abandoned at 90 feet.

Magnolia Petroleum Co.'s No. 5 Harrison, 1,151 feet from south and 249 feet from east lines of NW ¼ Section 28-3n-5w, Garvin County, was abandoned at 2,117 feet because of a hopeless fishing job.

Fred Morgan and others' No. 1 Carder, C SW SE Section 19-4n-22w, in Greer County, was abandoned at 3,227 feet as the crew was unable to fish out the drill pipe. It was a dry hole all the way.

L. H. and J. D. Oil Co.'s No. 1 Cummings, 1,175 feet from north and 150 feet from east lines of NW ¼ Section 27-1s-8w, Stephens County, was dry and abandoned at 2,394 feet.

Shirley Clum's No. 2-A J. Gilmore A, SW cor. NE SE Section 10-2s-5w, Stephens County, is a 10-bbl. completion, with sand at 788-807 feet, total depth 823 feet.

Coline Oil Co.'s No. 11 Higgins, NE SE SW Section 6-2s-2w, Carter County, produced 371 bbls. in three days from sand at 1,735-98 feet. It swabbed and flowed 205 bbls. in 24 hours previous to its three-day test. The well was completed.

Bland and others' No. 1 Center, NE SE NE Section 6-4s-2e, Carter County, was dry and abandoned at 1,896 feet, in shale.

Neff & Godfrey's No. 1 Ruth Ford, NE SE NW Section 13-4s-5e, Marshall County, was dry and abandoned at 271 feet. It had dry sand from 47 to 267 feet.

Levelle Coal Co.'s No. 9 Eppler, SE cor. NE SE NE Section 36-7s-5e, Marshall County, is a 4-bbl. pumper in sand at 450-54 feet.

Flemming & Kimball's No. 4 Snell B, NE cor. NW SW NW Section 31-7s-6e, Marshall County, started at 9 bbls. from sand at 448-65 feet.

### New Work

Collum and others had rig up for No. 6 Smith, SW cor. NE SE SE Section 34-1s-10w, Cotton County.

George Pace and others were drilling at 468 feet in No. 2 Watkins, SE cor. SW SW NW Section 22-2s-9w, Stephens County.

Earl Z. Gray had rig up for No. 3 Sullivan, SE cor. NW SE Section 36-4s-2w, Carter County.

Neff & Godfrey had machine in to start No. 2 Ruthford, a wildcat, SW cor. NE SE NW Section 13-4s-5e, Johnston County.

Levelle Coal Co. made a location for No. 10 Eppler, SW cor. SE NE Section 36-7s-5e, Marshall County. Flemming & Kimbrell made location for No. 6 Snell, SE SW NW NW Section 31-7s-6e. G. M. Felts made location for No. 1 Fee, NW cor. SW SW NW Section 6-8s-6e.

Equitable Oil & Gas Co.'s test in Johnston County, No. 1 Ferguson, NE NE SW Section 36-1s-3e, which had Oil Creek sand at 1,910-2,092 feet, from which flowed fresh water, continued drilling and found shale at 2,092-2,104 feet, sand at 2,104-2,210 feet and was drilling at 2,211 feet, still flowing fresh water.

## Canadian Imports

OTTAWA, Canada, Aug. 3.—Imports of petroleum, asphalt and their products into Canada in May were appraised at $4,448,874 against $1,734,012 in April. The major sources of supply, with percentages, were: United States, 79; Peru, 9.2; Colombia, 7.6; Venezuela, 3.5.

Imports of crude petroleum in May were 113,131,917 gallons against 40,446,492 gallons in April. The sources of the May imports were: United States, 85,654,331; Colombia, 11,839,134; Peru, 8,806,382; Venezuela, 6,832,070.

Petroleum and its products exported from Canada in May were valued at $213,428 compared with $11,166 in April.

## Canadian Gas Production

OTTAWA, Ontario, Aug. 3.—Natural gas production in Canada during May amounted to 1,516,756,000 feet compared with 2,077,437,000 feet in April and 1,442,521,000 feet in May, 1934. In the first five months of 1935 the output totaled 11,617,812,000 feet, a decline of 2.2 per cent from the production of 11,877,940,000 feet in the same period of 1934.

Imports of mixed (natural and artificial) gas in May were 6,596,000 feet valued at $4,382 compared with 4,816,000 feet worth $3,299 in April.

# Completions and Operations in Pennsylvania-New York Gas Area

By R. C. CONINE

COUDERSPORT, Pa., Aug. 5.—Sylvania Natural Gas Corp. completed No. 3 Z. L. James, Allegany Township, Potter County, for 27,000,000 feet a day at a depth of 5,124 feet. First gas was found at 5,119 feet, getting top of Oriskany at 5,116 feet. This well is slightly larger than Nos. 1 and 2 Z. L. James. In New York state, Rome Syndicate completed a test on the Meaker farm, York Township, Oneida County, at a depth of 1,286 feet. Initial rock pressure was 180 pounds.

### Pennsylvania Operations

East Penn Development Co. was drilling at 4,602 feet on the Ray French farm, Clymer Township, Tioga County, at the close of the week. Tully lime was reached at 4,588 feet and the sand at 4,598 feet. Cowanesque Natural Gas Co. was drilling at 5,165 feet on the E. A. Furman farm, Allegany Township, Potter County. Hanley & Bird was shut down at 4,030 feet on the George Burd farm, same township. Williamsport Natural Gas Co. was casing at 4,997 feet on the Hile-Ellis-Cobb No. 1, Genesee Township. The Tully lime was reached at 4,980 feet. Sylvania was drilling at 4,825 feet on the Merle A. Hill farm, same township. Stocum and others were drilling at 4,845 feet on the L. Thompson farm, same township.

Wyoga Oil & Gas Co. was drilling at 4,980 feet on its Tassel No. 3, Hebron Township, Potter County. Godfrey L. Cabot, Inc., was drilling at 1,025 feet on the A. G. Lyman farm, Ulysses Township. Same company was drilling at 2,880 feet on the Robert R. Lewis farm, Allegany Township. United Producers was drilling at 3,910 feet on its No. 2 K. Currier, same township and county. Penn-York was drilling at 2,610 feet on the William Cobb farm, same township. Potter Development Co. was drilling at 2,450 feet on the F. Robbins farm, Bingham Township. New York State Natural Gas Co. was drilling at 1,960 feet on the A. Bishop farm, Allegany Township. Sylvania was drilling at 453 feet on its No. 4 Z. L. James, same township. Penn United was building a rig on the C. Wainwright farm, Lawrence Township, Tioga County. William Snee and others were still shut down at 3,961 feet on the Summit Hotel test, South Union Townshiu, Fayette County.

### New York Operations

Trumbull and others were shut down at 1,000 feet on the W. B. Lasher farm, Throop Township, Cayuga County. Southwestern was drilling at 4,200 feet on the T. Moran farm, Alma Township, Allegany County. Cunningham Natural Gas Co. was cementing pipe on the Colligan farm test, same township. Belmont Quadrangle Development Co. was running pipe at 4,735 feet on the Van Copen & Whiteman farm test, Willing Township. The Tully in this well was found at 4,720 feet. Schrack and others were drilling at 3,340 feet on the M. M. Loring farm, same township. Sanderson and others were shut down at 3,186 feet on the Leon Bennett farm, Granger Township. Godfrey L. Cabot, Inc., was spudding on the Alice Cunningham farm, Willing Township. Wyoming Natural Gas Co. was shut down at 1,783 feet on the C. H. Caulling farm, York Township, Livingston County. Godfrey L. Cabot was moving in on the Dora Barber farm, Willing Township, Allegany County.

Hanley & Bird were rigging up on the M. Ackley farm, Greenwood Township, Steuben County. Property Shares, Inc., was drilling at 351 feet on its No. 2 Owens, Camden Township, Oneida County. John Seton and others staked a location on the M. Yousnew farm, Rome Township, Oneida County. Becker and others had a rig on the Burns farm, Alma Township, Allegany County.

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Aubrey Scofield, formerly division superintendent for the Gulf Refining Company at Lake Charles, La., has been transferred to Houston, Tex., where he will serve as assistant to the Gulf Coast superintendent of the Gulf Production Company.

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## Summary of California Field Operations for June, 1935

According to figures collected by the American Petroleum Institute, the total production of crude oil in California for June amounted to 16,708,859 bbls., an average of 556,962 bbls. per day. This is an increase of 62,052 bbls. per day over May production.

Total stocks of crude and all products in Pacific Coast territory decreased during the month 825,541 bbls. The total stocks at the end of the month were 118,541,979 bbls. The total stock decrease for 1935, up to June 30, was 7,676,338 bbls.

Seventy-four wells were completed during the month with an initial daily production of 69,807 bbls., compared with 72 wells completed during May with an initial production of 58,880 bbls.

### CRUDE PETROLEUM PRODUCTION

(Figures in Production and Stocks are in barrels of 42 gallons)

| Group No. 1: | Total production, June | Daily average — June, 1935 | Daily average — May, 1935 | Daily average — June, 1934 |
|---|---|---|---|---|
| Beiridge—North | 197,559 | 6,585 | 5,260 | 5,608 |
| Beiridge—South | 79,779 | 2,659 | 2,818 | 2,926 |
| Coalinga | 99,444 | 19,681 | 18,897 | 20,664 |
| Edison | 67,241 | 2,241 | 1,241 | .. ... |
| Elk Hills | 252,433 | 8,414 | 7,441 | 8,562 |
| Fruitvale | 147,354 | 4,912 | 3,628 | 4,014 |
| Kern River | 336,611 | 11,220 | 10,853 | 10,878 |
| Kettleman Middle Dome | ..... | ..... | ..... | 204 |
| Kettleman North Dome | 1,850,700 | 61,690 | 54,017 | 61,149 |
| Lost Hills | 144,546 | 4,818 | 4,915 | 4,411 |
| McKittrick | 112,493 | 3,750 | 3,837 | 3,191 |
| Midway-Sunset | 1,581,918 | 52,731 | 51,872 | 57,477 |
| Mountain View | 652,907 | 21,764 | 10,447 | 7,610 |
| Mount Poso | 408,918 | 13,631 | 13,779 | 10,599 |
| Round Mountain | 181,350 | 6,045 | 5,046 | 5,016 |
| Wheeler Ridge | 12,921 | 431 | 429 | 437 |
| Group No. 2: | | | | |
| Capitan | 40,756 | 1,359 | 1,248 | 573 |
| Elwood | 411,768 | 13,726 | 11,763 | 11,613 |
| Rincon | 62,650 | 2,088 | 2,028 | 1,461 |
| San Miguelito | 27,324 | 911 | 726 | 691 |
| Santa Barbara | 101,781 | 3,393 | 3,783 | 996 |
| Santa Maria | 146,946 | 4,898 | 4,257 | 5,466 |
| Summerland | 1,151 | 38 | 61 | 54 |
| Ventura Avenue | 1,054,852 | 35,162 | 30,562 | 26,796 |
| Ventura-Newhall | 112,404 | 3,747 | 3,767 | 4,027 |
| Watsonville | 1,725 | 58 | 60 | 60 |
| Group No. 3: | | | | |
| Brea-Olinda | 305,180 | 10,173 | 9,898 | 11,667 |
| Coyote—East | 83,091 | 2,770 | 2,665 | 3,194 |
| Coyote—West | 286,381 | 9,546 | 9,600 | 10,300 |
| Dominguez | 630,264 | 21,009 | 20,740 | 20,225 |
| Huntington Beach | 1,342,484 | 44,749 | 38,363 | 47,440 |
| Inglewood | 342,415 | 11,414 | 11,292 | 9,496 |
| Lawndale | 3,832 | 128 | 126 | 157 |
| Long Beach | 2,231,820 | 74,394 | 65,391 | 72,270 |
| Los Angeles-Salt Lake | 25,284 | 843 | 812 | 803 |
| Montebello | 183,519 | 6,117 | 5,580 | 5,451 |
| Newport | 101 | 3 | ..... | ..... |
| Playa Del Rey | 667,055 | 22,235 | 13,293 | 8,931 |
| Potrero | 13,157 | 439 | 405 | 412 |
| Richfield | 226,112 | 7,537 | 7,591 | 8,449 |
| Rosecrans | 81,022 | 2,701 | 2,713 | 2,915 |
| Santa Fe Springs | 1,176,374 | 39,212 | 36,598 | 41,809 |
| Seal Beach | 296,003 | 9,867 | 9,378 | 10,040 |
| Torrance | 205,045 | 6,834 | 6,777 | 7,306 |
| Whittier | 31,184 | 1,039 | 952 | 1,098 |
| Total June | 16,708,859 | 556,962 | 494,910 | 515,556 |
| Total May | 15,342,221 | 494,910 | | |
| Increase | 1,366,638 | 62,052 | | |

### OIL FIELD DEVELOPMENT

| | New rigs up | Active drlg. | Producers comp. | Daily initial output | Active producing | Abnd. wells — Drillers | Abnd. wells — Producers |
|---|---|---|---|---|---|---|---|
| Group No. 1: | | | | | | | |
| Beiridge—North | 1 | 6 | ... | ..... | ..... | ... | ... |
| Beiridge—South | ... | ... | ... | ..... | 163 | ... | ... |
| Coalinga | ... | 5 | 4 | 210 | 1,003 | ... | 7 |
| Edison | 3 | 8 | 5 | 1,161 | 35 | 1 | ... |
| Elk Hills | ... | ... | ... | ..... | 167 | ... | ... |
| Fruitvale | 1 | 2 | ... | ..... | 71 | 1 | ... |
| Kern River | 7 | 5 | 3 | 722 | 1,439 | 1 | 2 |
| Kettleman Middle Dome | 1 | 1 | ... | ..... | ..... | ... | ... |
| Kettleman North Dome | 4 | 23 | 2 | 7,142 | 113 | 1 | ... |
| Lost Hills | ... | 1 | ... | ..... | 338 | ... | ... |
| McKittrick | 1 | 2 | ... | ..... | 205 | 1 | 2 |
| Midway-Sunset | 7 | 4 | 4 | 1,440 | 2,468 | 4 | 1 |
| Mountain View | 6 | 17 | 4 | 22,352 | 76 | 3 | ... |
| Mount Poso | 5 | 6 | 8 | 3,348 | 181 | 4 | ... |
| Round Mountain | 2 | 2 | 1 | 298 | 60 | ... | ... |
| Wheeler Ridge | 1 | 1 | 1 | 75 | 35 | ... | ... |
| Group No. 2: | | | | | | | |
| Capitan | 1 | 2 | 1 | 328 | 18 | ... | ... |
| Elwood | 1 | 2 | 1 | 4,188 | 47 | ... | ... |
| Rincon | ... | ... | ... | ..... | 31 | ... | ... |
| San Miguelito | ... | 1 | ... | ..... | 1 | ... | ... |
| Santa Barbara | 2 | 2 | ... | ..... | 70 | 1 | ... |
| Santa Maria | ... | ... | 1 | 360 | 189 | ... | ... |
| Summerland | ... | ... | ... | ..... | 17 | ... | ... |
| Ventura Avenue | 2 | 10 | ... | ..... | 196 | ... | ... |
| Ventura-Newhall | 3 | 9 | 2 | 202 | 534 | 1 | ... |
| Watsonville | ... | ... | ... | ..... | 7 | ... | ... |
| Group No. 3: | | | | | | | |
| Brea-Olinda | ... | 1 | ... | ..... | 360 | 1 | ... |
| Coyote—East | ... | ... | ... | ..... | 82 | ... | ... |
| Coyote—West | 1 | 2 | 1 | 459 | 44 | ... | ... |
| Domingues | 5 | 4 | 5 | 4,999 | 83 | ... | ... |
| Huntington Beach | 2 | 5 | 1 | 135 | 486 | 1 | ... |
| Inglewood | 4 | 3 | 4 | 4,423 | 214 | ... | ... |
| Lawndale | ... | ... | ... | ..... | 6 | ... | ... |
| Long Beach | 21 | 64 | 7 | 2,633 | 1,177 | 3 | 1 |
| Los Angeles-Salt Lake | ... | ... | ... | ..... | 128 | ... | ... |
| Montebello | 1 | 3 | ... | ..... | 166 | ... | ... |
| Newport | 1 | 1 | ... | ..... | 1 | ... | ... |
| Playa Del Rey | 8 | 17 | 11 | 14,994 | 186 | .. | 1 |
| Potrero | ... | ... | ... | ..... | 14 | ... | ... |
| Richfield | ... | 1 | ... | ..... | 242 | ... | ... |
| Rosecrans | ... | ... | ... | ..... | 59 | ... | ... |
| Santa Fe Springs | ... | 5 | 2 | 438 | 504 | ... | ... |
| Seal Beach | ... | 2 | ... | ..... | 110 | ... | ... |
| Torrance | 1 | ... | ... | ..... | 477 | ... | ... |
| Whittier | ... | ... | ... | ..... | 161 | ... | ... |
| Miscellaneous drilling | 5 | 33 | ... | ..... | ..... | 8 | ... |
| Group No. 4: | | | | | | | |
| Buttonwillow gas field | ... | ... | ... | ..... | 11 | ... | ... |
| Delano gas field | 1 | 2 | 2 | Gas | 1 | 1 | ... |
| Dudley Ridge gas field | ... | 2 | ... | ..... | 1 | ... | ... |
| Goleta gas field | 1 | 1 | ... | ..... | ..... | ... | ... |
| Semi-Tropic gas field | 8 | 5 | 4 | Gas | 2 | ... | ... |
| Total June | 107 | 260 | 74 | 69,807 | 12,916 | 32 | 14 |
| Total May | 90 | 264 | 72 | 58,880 | 11,967 | 26 | 13 |
| Increase | 17 | *4 | 2 | 10,927 | 49 | 6 | 1 |
| Average for year 1934 | 53 | 196 | 38 | 47,553 | 11,053 | 21 | 17 |
| Average for year 1933 | 30 | 124 | 21 | 22,842 | 9,199 | 14 | 18 |
| Average for year 1932 | 18 | 108 | 15 | 13,069 | 8,928 | 16 | 14 |

*Decrease.

### Stocks Held in Pacific Coast Territory by California Oil Companies

| | June 30, 1935 | May 31, 1935 | June changes | June 30, 1934 |
|---|---|---|---|---|
| 1. Non-gasoline-bearing crude, residuum, gas and Diesel oils | 63,566,659 | 64,017,219 | —450,560 | 78,906,268 |
| 2. Gasoline-bearing crude | 33,284,045 | 33,237,119 | +46,925 | 35,500,861 |
| 3. Unblended natural gasoline | 2,522,508 | 2,811,370 | —288,862 | 2,507,723 |
| 4. Gasoline (not including distributing and service stations) | 9,429,248 | 9,762,526 | —333,278 | 12,374,999 |
| 5. Naphtha distillates | *1,290,566 | *1,290,424 | +142 | *1,173,145 |
| 6. All other stocks | †8,448,953 | †8,248,871 | +200,082 | †7,110,744 |
| Total | 118,541,979 | 119,367,520 | —825,541 | 137,573,740 |
| *Estimated amount of unfinished gasoline contained in item No. 5 | 1,048,129 | 1,043,186 | | 950,335 |
| †Coke included in item No. 6 | 527,537 | 528,822 | | 610,477 |

# WILDCAT OPERATIONS

## OKLAHOMA WILDCATS

Week Ending August 3

### NORTHERN OKLAHOMA

#### Alfalfa County

Tex-O-Kan Oil Co.'s No. 1 Acre, C SW NE Sec. 14-24-11w.
Oswego 5,810 ft.; at 6,255 ft. swbd. 70 bbls. oil in 24 hrs. 11/14/34; T.D. 6,460 ft.; cmtd. off tools.

#### Beckham County

**E. L. Martin et al's No. 1 Robertson, C NE SE Sec. 1-9-22w.**
**Spudded and S.D.**

**Star Oil Co.'s No. 1 Blair, C NW SE Sec. 22-9-26w.**
**Cellar and pits dug (2,200-ft. test).**

#### Blaine County

Earl Ingraham et al's No. 1 Masters, SW NW NW Sec. 27-16-11w.
S.D. 1,240 ft.

#### Caddo County

Denver Prod. & Ref. Co.'s No. 1 Sah-Can, C SE SE Sec. 33-10-10w.
Drlg. 3,205 ft.

H. W. Lee et al's No. 1 Stacey Ferrell, SW NE NE Sec. 3-6-13w.
S.D. for orders at 2,506 ft.

F. A. Turner et al's No 1 Spain, NE NE SW Sec. 1-5-11w.
Coring 2,603 ft.

#### Cleveland County

Arab Pet. Co.'s No. 1 McKiddy, SE SE NW Sec. 16-7-1.
Drlg. 4,275 ft.

Hall-Briscoe, Inc.'s No. 1 Fant, SW SW NE Sec. 27-10-2w.
Drlg. 3,886 ft.

#### Coal County

Amerada Pet. Corp. and Stanolind Oil & Gas Co.'s No. 1 Traveler' Life, SW NW SE Sec. 28-1s-9e.
Viola 4,467 ft.; T.D. 4,492 ft.; drlg. plug.

Carter Oil Co. et al's No. 1 Thompson, C S½ NE NW Sec. 34-2-9.
Coring 4,350 ft.

#### Comanche County

Oscar Jones' No. 1-A Sheets, NE SW Sec. 26-2-10w.
Machine.

#### Garvin County

Charles Carter and W. S. Key, Inc.'s No. 1 Wood, C NW SW Sec. 5-4-3e.
S.D. 2,405 ft.

#### Grant County

Helmerich & Payne's No. 1 Crouse, C NE SW Sec. 29-25-8w.
Sylvan 6,446 ft.; drlg. 6,470 ft.

Shell Pet. Corp.'s No. 1 Foster, NW SE Sec. 30-27-8w.
Drlg. 100 ft.

**Wentz Oil Corp. et al's No. 1 Wirtz (Community), SE SE NW Sec. 22-28-4w.**
Drlg. 2,610 ft.

Yingling et al's No. 1 Allen, SW SE Sec. 36-26-4w.
Location.

#### Greer County

Morgan et al's No. 1 Carder, C SW SE Sec. 19-4-22w.
T.D. 3,220 ft.; lost drill pipe; abd.

H. N. Payne et al's No. 1 Tressell, NW cor. Sec. 1-7-22w.
T.D. 1,785 ft.; U.R. 8-in. csg.; to deepen.
**Cleaning out.**

#### Harmon County

Massad & Caudle's No. 1 Grosnoe, SE SW Sec. 14-3-25w.
**Rigged up.**

J. J. Mathis' No. 1 Keith, NE NW SW Sec. 12-5-26w.
**Machine on ground.**

#### Hughes County

Caprock Oil Co.'s No. 1 Parks, SW SW SE Sec. 34-7-8.
T.D. 225 ft.

Freeman et al's No. 1 Kite, NW NW NE Sec. 5-6-10.
Top sand 700 ft.; show oil; S.D.

Earl Sadler's No. 1 Scott, NW cor. Sec. 23-7-9.
Drlg. 360 ft.

Texas Co.'s No. 1 Keaton, NW SW Sec. 4-8-10.
Set 5-in. csg. 3,950 ft.

#### Kay County

J. T. Lindsay's No. 1 Waggoner, NW NW NE Sec 3-27-1.
Drlg. 3,265 ft.

Lewis Prod. Co.'s No. 1 Hollenbeck, SE NE SE Sec. 18-27-2.
Moving in machine.

Marshall, Haddock et al's No. 1 Hermes, SW SW NW Sec. 6-26-4.
Drlg. 1,740 ft.

#### Kiowa County

Rajah Oil Co.'s No. 3 Stone, C SE NE Sec. 34-7-17w.
Sulphur wtr. 1,390-95 ft.; S.D.

#### Leflore County

**McCraw et al's No. 1 Tidwell, C NW SE Sec. 17-3-22.**
**T.D. 74 ft.; set 20-inch csg. & W.O.C.S.**

#### Lincoln County

Chester L. Carlock's No. 1 Young, C N½ NW NW Sec. 23-15-5.
**Spudded and S.D.**

Chas. Ralph's No. 1 Young, C N½ NW NW Sec. 23-15-5.
Spudded and S.D.

Stanolind O. & G. Co. and Amerada Pet. Corp.'s No. 1 Connelly, SE NE SE Sec. 23-14-2.
Drlg. 3,728 ft.; (correction).

Texas Co.'s No. 1 Niccum, SE SW NW Sec. 28-14-5.
**Mayes 4,290 ft.; Sycamore 4,505 ft.;** Hunton lime 4,598 ft.; cored slight show oil 4,629-44 ft.; show wtr.; P.B. with 50 sacks cement.

#### Logan County

Anderson-Kerr et al's No. 1 Goodium, NE cor. Sec. 15-15-3w.
Drlg. 1,850 ft.

Olson Drlg. Co., Anderson-Prichard and Frank Buttram's No. 1 Cavalt, NW SW SE Sec. 22-16-3w.
R.U. rotary.

Sinclair Prairie and Slick-Urschel's No. 1 Koatsch, SW cor. Sec. 23-15-3w.
Shut in for tanks.

**Stanolind O. & G. Co., Amerada Pet. Corp. and Eason O. & R. Co.'s No. 1** Gragg, SW SW NE Sec. 20-18-4w.
Drlg. 3,630 ft.

Texas Co. et al's No. 1 Wood, SW NE Sec. 34-15-4w.
Drlg. 2,975 ft.

#### Major County

Indian Territory Illuminating Oil Co. and Continental Oil Co.'s No. 1 Fairview, C E½ SW SE Sec. 32-22-14w.
Drlg. 6,506 ft.

#### Noble County

Atlantic Oil Prod. Co. et al's No. 1 Strom, 640 ft. S & W NE cor. SE¼ Sec. 8-20-1w.
Drlg. 2,850 ft.

#### Okfuskee County

Sunray Oil Co.'s No. 1 Culla, NE SW NE Sec. 13-12-8.
Drlg. 1,055 ft.

#### Oklahoma County

Gypsy Oil Co. and Indian Territory Illuminating Oil Co.'s No. 1 Salisbury, NW NE NE Sec. 13-14-4w.
T.D. 6,649½ ft.; set pipe; bailing.

Sinclair Prairie O. & G. Co.'s No. 1 Corbett, NE NW NE Sec. 17-13-3w.
Wilcox sand 6,645-6,706 ft., T.D.; flowed 485 bbls. of oil, 27% wtr., 2% b.s.; will kill and run Schlumberger tester.

#### Osage County

J. A. Freeberg et al's No. 1, NE cor. SE Sec. 1-25-6.
Drlg. 695 ft.

#### Payne County

Amerada-Stanolind et al's No. 1 Friedman, SE cor. Sec. 28-19-3.
Simpson dolomite 4,289 ft.; sand 4,301-05 ft.; flowed 660 bbls. first day; 560 bbls. second day, 1% wtr.; shut in for pipe line.

#### Pawnee County

Stanolind O. & G. Co.'s No. 1 Shunatana, NE SW SE Sec. 32-22-8.
Oswego 3,485 ft.; fishing at 3,624 ft.; whipstock at 2,690 ft.; P.B. to 2,846 ft.

#### Pontotoc County

E. M. Blanchard's No. 1 Crabtree, NE SE NE Sec. 27-3-6.
S.D. 2,920 ft.

Philip Boyle's No. 1 McCracken, NE NW NW Sec. 31-5-4.
Pumped salt water, 2,173 ft. T.D.; P.B. to 2,167 ft.

Charles E. Carter's No. 1 Wood, NW SW SE Sec. 5-4-2.
S.D. 2,405 ft.

Clark & Cowden's No. 1 Reynolds-Wagner, SE NW SE Sec. 17-2-7.
Location.

Continental Oil Co.'s No. 1 McCarty, C SW NW Sec. 12-1-7e.
Drlg. 2,730 ft.

Crabb-Craw Oil Co.'s No. 1-A Breco, SE NE SW Sec. 3-4-6.
Sand 1,106-18 ft.; pumped 10 bbls. in 24 hrs.; S.D.

W. A. Delaney et al's No. 1 Fulsome, SE NE Sec. 35-4-6.
Location.

Fleetborn Oil Corp.'s No. 2 Oliver (twin), 280 ft. S and 1,040 ft. E of C Sec. 21-4-5.
Sand 1,090-1,140 ft., T.D.; F.F.W.; abd.

Franks Bros.' No. 1 Abbott, SW NW NE Sec. 24-3-6.
Rig.

Gillette & Kroeger's No. 1 Duver, NW NW SE Sec. 36-1n-6e.
T.D. 1,325 ft.; S.D.

McBride Inc. et al's No. 1 Copeland, SE NW Sec. 31-4-5.
Location.

Southern Oil Co.'s No. 1 Perry, SW SW NW Sec. 11-4-6.
Rig on ground.

Southern Oil Co.'s No. 1 Walker, NW NW SW Sec. 11-4-6.
**H.F.W. 1,530 ft.; P.B. and shot with 30** qts. at 1,162-72 ft.; pumped 20 bbls. in 24 hrs.; completed.

Leonard Williams et al's No. 1 Breedon, NW cor. Sec. 6-2-5.
Spudded, rigging up standard tools.

#### Pottawatomie County

Paul Traugh et al No. 1 Lowry, near C NE SE NE Sec 30-6-5.
Broken sand 2,415-46 ft.; solid sand 2,-446-61 ft.; T.D. 2,462 ft.; flowed 105 bbls. in 2 hrs.; C.O.

#### Seminole County

Carter Oil Co. and Shell Petroleum Corp.'s No. 1 Brown, C W½ SE SW Sec. 23-8-5.
Wilcox sand 4,408-20 ft., T.D.; dry; P.B. to 4,185 ft.; acidized Hunton; swbd. dry; S.D.

L. Cooper's No. 1 Chandler, NE SE SW Sec. 4-5-6.
S.D. 1,780 ft.

Ray Dorris and J. T. Hall's No. 1 Dorris, SE SE SW Sec. 31-10-7.
Sand 520-60 ft.; H.F.W.; S.D. 608 ft.

Scott & Smith's No. 1 Abb, SE NW SE Sec. 4-6-6.
**S.D. 2,124 ft.; R.U. standard tools.**

Van Deventer et al's No. 1-A Bender, NE NE SW Sec. 3-6-8
Gilcrease sand 3,015-30 ft.; H.F.W.; fishing for csg.; pulled csg.; S.D.

Verser & Clay et al's No. 1 Thomas, NE SE NW Sec. 1-6-6.
Drlg. 2,870 ft.

Tom Phillips et al's No. 1 Abbott, NE cor. Sec. 33-8-7.
Wilcox 4,339-51 ft., dry; P.B. to 3,198 ft.; swbd. and flowed 225 bbls. in 4 days; running tubing.

#### Texas County

Cabor Carbon Co.'s No. 1 Jackson, C NW Sec. 7-3n-15ecm (Cimarron Meridian).
Drlg. at 4,020 ft.

#### Washita County

Okla-Midwestern Oil Co.'s No. 1 Dock, SW cor. Sec. 21-8-18w.
H.F.W. 2,710-17 ft., T.D.

L. P. McWhirter's No. 1 fee, SW cor. Sec. 34-8n-19w.
T.D. 1,008 ft.; S.D. for repairs.

### SOUTHERN OKLAHOMA

#### Atoka County

L. O. Garner et al's No. 1 Garner, C NE NW NE Sec. 27-1n-15 (800-ft. test).
Machine.

Keaton et al's No. 1-A Roland, NE cor. NW NE NE Sec. 16-3s-10e.
T.D. 850 ft. (corrected); lime at 800-47 ft.; will treat.

Malarnee et al's No. 2 D.O.K. land, C SE SE Sec. 35-2s-13.
T.D. 3,115 ft.; R.U. rotary.

Mid-Continent Petr. Corp. et al's No. 1 Fulton, SW cor. Sec. 19-1s-12e.
T.D. 1,299 ft.; reaming.

R. H. Pierce et al's No. 1 Aetna Life Ins. Co., NW SW NE Sec. 10-1n-13e.
Recmtd. 12½-in. pipe 941 ft.; T.D. 985 ft.

Vierson et al's No. 1 Williams, NE SW NW Sec. 34-2s-10.
Set 10-in. csg. 1,790 ft.

#### Atoka County

Acre et al's No. 1 Acre, C SW NE Sec. 14-24-11w.
T.D. 6,460 ft.; cleaning out.

#### Bryan County

Welch Oil Corp.'s No. 1 Collins, NE NE Sec. 19-8s-8e.
Drlg. 820 ft.

J. D. Parks' No. 1 Coats, SE NE SW Sec. 1-5s-8e.
T.D. 325 ft.; S.D.

**H. B. Smith et al's No. 1 Henry, C NW NE Sec. 10-8s-7e.**
**Rig (4,500 ft. test).**

Trio Oil Co.'s No. 1 Gilbert, SW NE SW Sec. 25-8s-7
Set pipe 896 ft.

#### Carter County

Bland et al's No. 1 Center, NE cor. Sec. 6-4s-2e.
Dry and abd. 1,896 ft.

Waco Turner's No. 1 Munson, NE NW NE Sec. 35-5s-2w.
Drlg. 4,725 ft.

Carter Oil Co.'s No. 1 Carter-Williams, SW NE SW Sec. 27-2s-3w (7,000-ft. test).
Drlg. lime 6,686 ft.

#### Choctaw County

E. B. Abernathy's No. 1 Christian, 400 ft. N and 1,245 ft. W of SE cor. Sec. 1-6s-19e.
Drlg. hard sand 577 ft.

Rhodes et al's No. 1 Possumik Savings Bank, SE cor. Sec. 1-5s-17.
Drlg. 322 ft.

#### Jackson County

Associated Oil Co.'s No. 1 Harrell, NE NE SE Sec. 13-1s-21w.
S.D. 875 ft.; red beds.

Dengail Oil & Gas Co.'s No. 1 Robinson, SE SE NE Sec. 32-1s-22w.
Drlg. 2,545 ft.

Gypsy Oil Co.'s No. 1 Boucher, NW SW SW Sec. 32-1-19w.
T.D. 2,340 ft., in lime.

Gypsy Oil Co.'s No. 1 Stokes, SE NW SW Sec. 11-1-20w.
Lime 1,709-11 ft.; T.D. 1,722 ft.; S.D.

Marshall & Burnham's No. 1 Hess, NE SW NE Sec. 27-1s-20w.
T.D. (corrected) 1,160 ft.; S.D.

Palo Duro Oil Co.'s No. 1 Ealum, SW SW SE Sec. 16-2-21w.
S.D. 2,505 ft.

Triangle Oil Co.'s No. 1 Fox, E½ W½ NW Sec. 11-3n-20w.
S.D. 632 ft.

#### Jefferson County

Gypsy Oil Co.'s No. 1 James, SW SE SE Sec. 30-2s-6w.
S.D. 2,102 ft.

G. W. Howell et al's No. 1 Currey, SE SE SW Sec. 36-4s-9w.
Drlg. 965 ft.

#### Johnston County

W. A. Delaney et al's No. 1 Diamond, NW NE SE Sec. 5-1s-8.
Drlg. 2,100 ft.

M. A. Neff and R. A. Godfrey's No. 1 Ford, NE SE NW Sec. 13-4s-5.
Drlg. 87 ft.

Schermerhorn Oil Co.'s No. 1 Rich, SW SE SE Sec. 35-4s-4e.
Drlg. 922 ft.

#### Love County

Sinclair Prairie Oil Co.'s No. 1 Stockton, SE SE SW Sec. 26-6s-2w (5,000 ft. test).
Drlg. 2,416 ft.

#### Marshall County

Jess Cook et al's No. 1 May, NE NW Sec. 12-8s-5.
Drlg. 75 ft.

Neff & Godfrey's No. 2 Ruthford, 790 ft. N and 580 ft. W of C Sec. 13-4s-5e.
Machine.

Norman Smith's No. 1 Chestnut, NE cor. Sec. 23-8s-5e.
Drlg. 275 ft.

Paul Robb's No. 1 Vittetoe, C NE SE Sec. 11-5s-4e.
Top Sylvan shale 5,405 ft.; T.D. 5,461 ft.; S.D.

#### Murray County

Equitable O. & G. Co.'s No. 1 Ferguson, NE NE SW Sec. 36-1s-3
Oil Creek sand 1,910-2,092 ft.; drlg. 2,-210 ft.; flowing fresh wtr.

#### Pushmataha County

C. W. Whitehead et al's No. 1 Misser, SE SW SW Sec. 35-3s-18e.
Drlg. 3,401 ft.

#### Stephens County

Geo. Pace et al's No. 1-A Damron, SE SE SW Sec. 25-2s-6w.
Location.

Prince Bros.' No. 1-A Williams, C SW SE Sec. 19-2-8w.
R.U. rotary.

#### Tillman County

J. B. Connelly's No. 1 McCord, NW SE NE Sec. 15-1-17w.
T.D. 300 ft.; C.O.

Loper et al's No. 1 Conrad, NE cor. Sec. 35-1s-19w.
Drlg. in brown shale 1,660 ft.

## KANSAS WILDCATS

Week Ending August 3

**(Descriptions are East unless marked otherwise)**

#### Barber County

**Southern Drlg. Co. et al's No. 1 Davis, 330 ft. from W and 330 ft. from S lines of NE Sec. 13-34-15w.**
Viola 5,215 ft.; at 5,275 ft., 1,000,000-ft. gas show and spray of oil; acidized.

I. H. Wentz' No. 1 Skinner, SE NW NW NE Sec. 29-31-14w.
K.C. lime 3,890 ft.; drlg. 4,105 ft.

#### Barton County

Lario O. & G. Co. et al's No. 1 Peter, NW cor. Sec. 24-20-11w.
Rig.

**Palmer Oil Corp.'s No. 1 Morris, SE NW NE Sec. 6-19-15w.**
Drlg. 2,455 ft.

**C. L. Price et al's No. 1 Ehrlich, NW SE Sec. 10-16-13w.**
Drlg. 2,425 ft.

**Suppes & Witt's No. 1 Hayes, NW cor. Sec. 7-16-15w.**
Drlg. 2,600 ft.

**Torrey & Feaster's No. 1 Feist, NE NE SE Sec. 29-18-11w.**
Drlg. 2,170 ft.

### Butler County

**Pelhamus et al's No. 2 Semisch, C S½ NE NE Sec. 5-28-7.**
Sand 2,721-58 ft.; pumped 20 bbls. oil, 2 bbls. wtr. in 12 hrs.

**Western Kansas O. & R. Co.'s No. 1 King & Marshall, NW NW SW Sec. 11-28-6.**
C.O. 2,183 ft.

### Clark County

**Watchorn Pet. Co.'s No. 1 Stevens, NW NE NW Sec. 21-32-21w (old T.D. 4,-290 ft.).**
C.O. to deepen.

### Cowley County

**Baden, Johnson, Roth & Faurot's No. 1 David, NE SW Sec. 35-30-4.**
Drlg. 2,500 ft.

**Lloyd, Frost & Study's No. 1 Weathered, SW SE SE Sec. 28-31-3.**
**Siliceous lime 3,320 ft.; pumped 92 bbls. of oil and 47 bbls. of wtr. in 17 hrs.; H.F.W. 3,405 ft.; P.B. 3,349 ft.; pumped 550 bbls. oil and 70 bbls. wtr.**

**Murfin & Stewart's No. 1 Newton, SE SE SE Sec. 31-30-2.**
Rig.

**Wakefield et al's No. 1 Auman, SE SE NE Sec. 32-33-3.**
Drlg. at 300 ft.

**Wakefield's No. 1 Tharp, SE SE NE Sec. 10-32-3.**
Dry and abd. 3,465 ft.

### Dickinson County

**Dutch Oil Co.'s No. 1 Phillips, C NE NW Sec. 15-15-1e.**
**Hunton 2,808 ft.; H.F.W. 2,812 ft.; S.D. 2,880 ft.**

### Ellis County

**Joe Aylward's No. 1 Dreiling, SE SE SE Sec. 3-14-16w.**
Dry and abd. 3,490 ft.

**Ellis County Oil Co.'s No. 1 Freis, near C SE SE NW Sec. 10-12-20w.**
Moving in material.

**Helmerich & Payne et al's No. 1 Kuhn, C NE quarter Sec. 16-14-20w.**
Drlg. 3,657 ft.

**Tom Palmer and Storm King Oil Co.'s No. 1 Ruder, SE SE NW Sec. 17-15-18w.**
Show oil 2,344-46 ft.; pay 3,422-25 ft.; 1,400 ft. of oil in hole.

**L. Roark et al's No. 1 Bemis, SE cor. Sec. 16-11-17w.**
Drlg. 575 ft.

**L. Roark et al's No. 1 Bemis, SE SE SE Sec. 16-11-17w.**
Drlg. 340 ft.

**Stanolind O. & G. Co.'s No. 1 Penney-Wann, NW SW SE Sec. 12-15-20w.**
Dry and abd. in granite, 3,711-16 ft.

### Ellsworth County

**Franco Central et al's No. 1 Frevert, SW cor. Sec. 8-17-10w.**
Spudding.

**Lario O. & G. Co.'s No. 1 State, SW SW SW Sec. 29-15s-8w.**
T.D. 2,927 ft.; P.B. 2,525 ft.; fishing.

### Graham County

**Casco Oil Co.'s No. 1 Kaufman, C NE NE Sec. 13-6-24w.**
Rotary rig.

**Helmerich & Payne et al's No. 1 Stites, C SW SW Sec. 8-10-22w.**
T.D. 3,964 ft.; bailing mud.

**Vickers Pet. Co. & Phillips Pet. Co.'s No. 1 Hutton, 430 ft. W and 330 ft. S of NE SE Sec. 29-8-22w.**
Rig.

### Harper County

**Kessler, Thier et al's No. 1 Wolfje, SW SW SE Sec. 17-32-6w.**
Drlg. 4,600 ft.

### Harvey County

**Goering Bros.' No. 1 Brainard, NE SW Sec. 3-23-2w.**
Drlg. 1,850 ft.

**H. H. & S. Oil Co.'s No. 1 Frizzle, NE NE SE Sec. 31-22-2w.**
Drlg. 3,591 ft.

**Hartman & Blair et al's No. 1 Redinger, NW cor. Sec. 15-24-3w.**
Fishing 3,045 ft.

**Winkler Koch et al's No. 1 Mueller, SE SW NW Sec. 15-23-2w.**
Drlg. 3,520 ft.

### Kingman County

**Derby et al's No. 1 Bartholomew, SW NW NW Sec. 8-27-4w.**
Set 4-in. csg. 4,016 ft.; cored to 4,027 ft.; standardizing.

### McPherson County

**Carey & Miller's No. 1 Husband, SE SE NW Sec. 6-19-2w.**
Drlg. 1,705 ft.

**Hollow, Toews & Hinkle's No. 1 Aschman, NW NW SE Sec. 8-21-4w.**
Drlg. 2,590 ft.

**Shell Pet. Corp.'s No. 1 Wenger, NE cor. Sec. 2-20-1w.**
**Viola 3,356-64 ft.; T.D.; swbd. 255 bbls. in 10 hrs.; 54% wtr.; acidized; potential production 100 bbls. oil, 620 bbls. of wtr.; P.B. to 3,350 ft.; pumped 80 bbls. of oil and 210 bbls. of wtr. in 7 hrs.; coring 3,444 ft.**

### Osage County

**Jim Edwards' No. 1 Detrick, C NW SE Sec. 21-14-15.**
Show oil and gas 783-800 ft.; T.D. 800 ft.; shut down.

### Reno County

**Allison & Fitzwilliams' No. 1 Dukelow, NE NE NE Sec. 11-22-6w.**
Drlg. 2,360 ft.

**Anderson & Kerr et al No. 1 Davies, NE cor. Sec. 28-23-7w.**
S.D. 4,102 ft.

**Haynes Bros.' No. 1 Mueller, SE SE NW Sec. 30-24-4w.**
Base Mississippi lime 3,590 ft.; C.O. 3,-602 ft.; T.D.

**Shell Pet. Corp.'s No. 1 Reese, center W½ W½ SW¼ Sec. 11-26-9w.**
Drlg. 600 ft.

**Stanolind & Amerada's No. 1 J. J. Hilger A, NE NE SW Sec. 21-46-4w.**
Drlg. 945 ft.

### Rice County

**Aylward et al's No. 1 Rickard, SW NW Sec. 22-18-9w.**
Rigging up.

**Detrick et al's No. 1 Conner, C NE NE Sec. 28-19-7w.**
Spudded and S.D.

**Detrick et al's No. 1 Monroe, C NE NE Sec. 9-20-7w.**
Spudded & S.D.

**L. E. Douglas and Hutchinson O. & G. Co.'s No. 1 Hammell, NE NE NE Sec. 16-19-10w.**
Moving in material.

**Three Rivers Oil Co.'s No. 1 Buehler, NW NW NW Sec. 17-18-8w.**
U.R. 8-in. csg. 2,463 ft.

### Rooks County

**El Dorado Refining Co.'s No. 1 Marshall, C SE SE Sec. 8-7-17w.**
Rigged up.

**Murfin et al's No. 1 Washusin, NE NE SE Sec. 19-9-16w.**
Moving in tools.

**Lario O. & G. Co. et al's No. 1 Fisher, NE cor. Sec. 22-10-18w.**
Rigged up.

**Smith & Ash's No. 1 Nelson, NW NW NE Sec. 27-10-16w.**
U.R. 8-in. csg.; ½ bbl. wtr., 3,030-90 ft.

**Trees Oil Co. and Findeiss' No. 1 Johnson, SW SW SE Sec. 26-10-19w.**
Drlg. 2,825 ft.

### Rush County

**Boyle & Grosman et al's No. 1 Yost, C SW SW Sec. 28-17-15w.**
Granite Wash 3,700 ft.; H.F.W. 3,719-22 ft.; drlg. 3,745 ft.

**Darby Pet. Co.'s No. 1 Jacobs, SW SW NW Sec. 3-16-19w.**
Location.

**Gypsy Oil Co.'s No. 1 Kraisinger, SE NE SE Sec. 23-18-17w.**
Drlg. 1,697 ft.

**Lario O. & G. Co. et al's No. 1 Gillig, NE SE NW Sec. 24-17-17w.**
Drlg. 3,315 ft.

**Ramsey Pet. Co. et al's No. 1 Darkes, SW SW NW Sec. 5-17-20w.**
R.U., cable tools at 3,520 ft.

**Twin Drlg. Co. et al's No. 1 Appl, SW SW NE Sec. 29-17-17w.**
S.D. at 2,505 ft.

### Russell County

**J. Brouk and R. D. Bailey's No. 1 Kleusner, NW SE Sec. 34-15-12w.**
Drlg. 2,745 ft.

**Buffalo Oil Co.'s No. 1 Kuns, NE NE SW Sec. 19-14-15w.**
Cellar and material.

**Coraleana Oil Co.'s No. 1 Flegler, SE SE SE Sec. 11-15-14w.**
Drlg. 2,070 ft.

**Finney et al's No. 1 Chenowath, SW SW SW Sec. 10-15-13w.**
Cellar.

**Hartman & Blair's No. 1 Claussen, SE NE SW Sec. 34-12-14w.**
Rig.

**Hartman & Blair's No. 1 Mills, SE SE SW Sec. 27-13-15w.**
Drlg. 555 ft.

**I. W. Murfin's No. 1 Moore, NW NW SW Sec. 15-13-12w.**
Rigging up.

**Murfin et al's No. 1 Gorham estate, NE NE SE Sec. 29-14-15w.**
Cellar.

**Nassau Oil Corp.'s No. 1 Karst, NW SW NE Sec. 27-15-14w.**
Drlg. 1,015 ft.

**Pryor and Lockhart's No. 1 Spicer, NE SE Sec. 21-11-15w.**
Drlg. 2,740 ft.

**P. G. Reynolds' No. 1 Fredrickson, SE SW SE Sec. 6-13-12w.**
Cellar.

**Roth & Faurot's No. 1 Shaffer, NW NW NE Sec. 31-13-12w.**
Drlg. 1,580 ft.

**Stearns & Streeter's No. 1 Dreiling, SW SW SW Sec. 8-13-15w.**
Drlg. 1,025 ft.

**Vernon & Murphin's No. 1 Becker, NE cor. Sec. 32-15-14w.**
Drlg. 2,565 ft.

**A. E. Sealy et al's No. 1 Herman, SE NW Sec. 27-12-15w.**
Top Oswald 3,030 ft.; drlg. 3,230 ft.

### Sedgwick County

**Allison & Fitzwilliams et al's No. 1 Struthers, NE SW Sec. 34-28-2w.**
Miss. lime 3,667 ft.; C.O. 3,684 ft.

**Dickey Oil Co. et al's No. 1 Chase, SE cor. Section.**
Drlg. 1,965 ft.

### Stafford County

**Atlantic Oil Prod. Co. and Phillips Pet. Co.'s No. 1 Cornwall, C NE SW Sec. 4-25-13w.**
Moving in material (rotary).

**C. B. Davis et al's No. 1 Riley, SE cor. Sec. 19-22-11w.**
**Siliceous lime 3,589-3,606 ft.; T.D. 5,630 ft.; pumped 135 bbls. oil & 17 bbls. wtr.; completed.**

**Empire O. & R. Co.'s No. 1 Grove, NE NE NW Sec. 5-22-11w.**
Drlg. 3,090 ft.

**Rose-Spring Drlg. Co.'s No. 1 Toland, NW NW SW Sec 2-25-14w.**
Rig.

### Sumner County

**Allison & Fitzwilliams et al's No. 1-B Hitchcock, SW SW NE Sec. 16-30-1w; (correction).**
Ran 6-in. csg. to 3,203 ft.

**D. J. Wilson et al's No. 1 Clark, 1,320 ft. from W and 25 ft. from S line and 1,-320 ft. from W line of NW Sec. 15-35-1w.**
Ran 10-in. csg. to 1,195 ft.

**Winkler & Koch et al's No. 1 Belsley, SW SW NW Sec. 2-32-2w.**
Drlg. 1,805 ft.

### Trego County

**Central Commercial's No. 1 Wagg, NW NW SE Sec. 17-13-21w.**
Fishing at 1,600 ft.

**Hansa & Lauck and Olson Drlg. Co.'s No. 1 Lang, SE SE NW Sec. 1-14-21w.**
Drlg. 3,616 ft.

**Vickers et al's No. 1 Secor, NW NW NW Sec. 25-15-24w.**
Drlg. 2,500 ft.

### Woodson County

**Connell & Marshall's No. 1 Klick, SW NW SW Sec. 20-25-14.**
Sand 1,390-1,403 ft.; T.D.1,437 ft.; shot with 130 qts.; C.O.

## GULF COAST WILDCATS

Week Ending August 3

### Raccoon Bend—Austin County

**Humble O. & R. Co.s No. 9-X Bellville, 1,663 ft. along most northerly SW line, 750 ft. of most northerly SW line from 8-X, in Wm. C. White Sur.**
**10¾-in. csg. at 1,093 ft.; drlg. shale at 3,200 ft.**

**Humble O. & R. Co.'s No. 6-X Wilson, 2,621 ft. along SW line from SW¼, 150 ft. NE of SW line, Wm. Harvey Sur.**
**T.D. 4,015 ft.; I.P. 36 bbls. per hour, through ½-in. choke.**

### Damon Mound—Brazoria County

**Intercoastal Oil Co.'s No. 13 Wisdom, 150 ft. from NW line and 10 ft. from SW line of Lot "D," Blk. No. 51.**
**S.D. 2,600 ft.**

### Danbury—Brazoria County

**Turnbull & Irwin's No. 1 Blakely, Sec. 14, H.T.&B. Sur.**
Drlg. shale 4,235 ft.

### Hastings—Brazoria County

**Humble O. & R. Co.'s No. 1 E. Lively, 330 ft. from the N line, and in the center of E and W lines of Lot 13, A.C.H.&B. Sur.**
**T.D. 6,099 ft.; I.P. 15 bbls. per hour, through ¼-in. choke; T.P. 425 lbs.; C.P. 600 lbs.**

**Humble O. & R. Co.'s No. 1 J. F. Bridges, center of N 10 acres of 20-ac. lease, A. C.H.&B. Sur. No. 2.**
**Location.**

**Humble O. & R. Co.'s No. 2 J. F. Bridges, center of S 10 acres of 20-ac. lease, A. C.H.&B. Sur. No. 2.**
**Location.**

**Humble O. & R. Co.'s No. 1 J. C. Johnson, center of 10-ac. lease, A.C.H.&B. Sur. No. 2.**
16-in. csg. 116 ft.; W.O.C. 121 ft.

**Stanolind Oil & Gas Co.'s No. 1-A, W. H. Avitts, 330 ft. S, 330 ft. W of NE cor. of 45.85-ac. "A" lease, A.C.H.&B. Sur. No. 1.**
**10¾-in. csg. 2,046 ft., W.O.C. 2,059 ft.**

**Stanolind Oil & Gas Co.'s No. 2 Williams, 330 ft. S, 330 ft. E of the most NW cor. of the Williams 81.13-ac. tract A.C.H. &B. Sur. No. 1.**
**T.D. 2,045 ft.; 10-in. csg. at 2,044 ft.**

**Stanolind Oil & Gas Co.'s No. 1 Frank Guido, 330 ft. N, 990 ft. W of SE cor. of Guido 40-ac. tract, H.T.&B. Sur. No. 36.**
**Drlg. shale 4,040 ft.**

**Stanolind Oil & Gas Co.'s No. 1 Fannie Drake, 330 ft. N, 990 ft. W of SW corner of 120-ac. tract, H.T.&B. Sur. No. 36.**
**Drlg. shale 4,505 ft.**

**Stanolind Oil & Gas Co.'s No. 1 Pennock Estate, 330 ft. N, 990 ft. W of SE cor. of 40-ac. tract, H.T.&B. Sur. No. 36.**
**Drlg. shale 4,936 ft.**

**Stanolind Oil & Gas Co.'s No. 1 Laur D. Shaw, 330 ft. S, 330 ft. W of most easterly NE cor. of 120-ac. tract, H.T.&B. Sur. No. 36.**
**Drlg. shale 4,609 ft.**

**Stanolind O. & G. Co.'s No. 3 J. W. Surface, 330 ft. S and 455 ft. W of most northerly NE cor. of 75.9-ac. tract, A.C. H.&B. Sur. No. 2.**
**T.D. 6,100 ft.; I.P. 584 bbls. per day, through ¼-in. choke, 990 lbs. T.P., 950 lbs. C.P.**

**Stanolind O. & G. Co.'s No. 2 B. L. Turner, 330 ft. at R/A from NW line and 330 ft. from S line of Turner 195-ac. tract, A.C.H.&B. Sur. No. 1.**
**Reaming to set 7-in. csg. at 6,100 ft.**

**Stanolind O. & G. Co.'s No. 4 Sneed, 330 ft. S, 330 ft. W of NE cor. of Lot 13, D. M. Jay Subd., on Sneed 225-ac. tract, A.C. H.&B. Sur. No. 2.**
**Coring sand 6,765 ft.**

**Stanolind O. & G. Co.'s No. 2 E. Grote, 466 ft. at R/A from N line and 1,061.6 ft. at R/A from E line of Grote 71.62-ac. tract, A.C.H.&B. Sur. No. 2.**
Running 7-in. csg. at 6,100 ft.

**Stanolind O. & G. Co.'s No. 2 Turner, 285 ft. N, 2,876 ft. W of SE cor. of 195-ac. tract, A.C.H.&B. Sur. No. 1.**
**T.D. 6,100 ft.; I.P. 75 bbls. in 3 hours through ¼-in. choke, 850 lbs. T.P., 700 lbs. C.P.**

### Manvel—Brazoria County

**Bowles and Barsodi's No. 5 B. E. Norvell Investment Co., 274.5 ft. from S line, 446 ft. from E line of Lot 45, Sec. 23, H.T. &B. Sur.**
**Location.**

**Jay Simmons' No. 1 Wilson, center of Lot 25, H.T.&B. Sur. No. 23.**
Location.

**Jay Simmons' No. 1 Stitt, cor. of E line, Lot 28.**
Abandoned 4,117 ft.

**J. Simmons et al's No. 1 Martens, 31 ft. WE line center of North and South lines, Lot 10.**
S.D. 1,120 ft.

**J. W. Sorrells' No. 1 Swift, Blk. 21, Abst. 218, H. N. Little Sur.**
Derrick.

**Texas Co.'s No. 6 Houston Oil Field Asso., 247.5 ft. S, 400 ft. W of NE cor. of Lot 25, A.C.H.&B. Sur., Sec. 91.**
Drlg. shale 2,846 ft.

**Texas Co.'s No. 12-A Belcher, 770 ft. S, 41 deg. 40 ft. W and 648 ft. S, 47 deg. 59 ft. E from N cor. of lease, H. N. Little Sur.**
T.D. 4,150 ft.; P.B. to 3,600 ft.

**Texas Co.'s No. 3 Boff, 50 ft. W, 50 ft. S of NE cor. of Lot No. 24, Charles O'Donnell Sur.**
T.D. 5,156 ft.; I.P. 15 bbls. per hour, 250 lbs. T.P.; 325 lbs. C.P.

**Texas Co.'s No. 1 O. W. Halligan, center of Lot 27, H.T.&B. Sur. No. 23.**
Drlg. sand with show of oil at 4,010 ft.

**Texas Co.'s No. 2 O. W. Halligan, center of Lot 26, H.T.&B. Sur. No. 23.**
**T.D. 4,060 ft., sidetracked and drilled to 4,030 ft.; P.B. to 3,000 ft.**

**Texas Co.'s No. 16 Houston Oil Fields Assn., 247 ft. S, 440 ft. E from NW cor. of Lot 19, A.C.H.&B. Sur. No. 91.**
Drlg. shale at 5,600 ft.

**Texas Co.'s No. 2 Dawson, 247 ft. S, 341 ft. W of NE cor. of Lot 58, H.T.&B. Sur. No. 23.**
Location.

**Thompson Drlg. Co.'s No. 2 Exaccastedes, H.T.&B. Sur. No. 23, center N and S lines, 220 ft. E of W line, Lot 39.**
Spudded.

**Trumba Oil Co.'s (J. M. Campbell) No. 1 H. McCauley, 150 ft. each way out of NE cor. of W 5 acres of Lot No. 2, A.C.H.&B. Sur. No. 91.**
Location.

**Turman Oil Co.'s No. 2 Hart, 40 ft. N, 50 ft. W of No. 1.**
**T.D. 4,020 ft.; pulled screen and perforated csg.**

**Turman Oil Co.'s No. 3 Hart, 150 ft. E of W line, 433 ft. S of N line of Lot 8.**
Location.

**Uscan Oil Co.'s No. 1 France, H.T.&B. Sur. No. 23, 150 ft. W of E line, 490 ft. S of N line, Lot 9.**
Rigging up.

**Uscan Oil Co.'s No. 1 Ebbert, 247.5 ft. from N line, 247.5 ft. from S line of 10-ac. tract, Sec. 23, H.T.&B. Sur.**
**T.D. 4,085 ft.; set 28 ft. of screen; 2½-in. tubing 8 ft. off bottom; preparing to pump.**

**Whittle Oil Co.'s No. 1 Duke, 320 ft. W of E line, center N and S Lot 18, H.T.&B. Sur. No. 23.**
**T.D. 4,010 ft.; flowing 180 bbls. P.L.O. per day, ¼-in. choke; 410 lbs. T.P.**

### Old Ocean—Brazoria County

**Harrison & Abercrombie's No. 2 Bernard River, 1,000 ft. N, 54 deg. W, 400 ft. S, 36 deg. W of No. 1, Charles Breen Sur.**
**T.D. 8,661 ft.; top sand 8,646 ft.; recovered stuck drill, reaming to bottom.**

### Port Lavaca—Calhoun County

**Halliburton Oil Prod. Co.'s No. 3 Burton 801 ft. E of No. 1 M. Sanches.**
W.O.C. 6,242 ft.

**Steinberger Pet. Co.'s No. 3 Shofner, 466 ft. out of SW cor. of 100-ac. lease.**
Rigging up.

**Steinberger Pet. Co.'s No. 2 Shofner, 932 ft. SW of No. 1 Shofner, and 466 ft. from SE line of tract, M. Sanches Sur.**
**T.D. 6,244 ft.; 7-in. 6,216 ft.; testing.**

**Texas Co.'s No. 1 Shofner, SE offset to Steinberger's No. 1 Shofner, M. Sanches Sur.**
**T.D. 6,260 ft.; 7-in. csg. 6,232 ft.; P.B and sidetracked at 5,511 ft.; T.D. 6,242 ft.; made 17 bbls. of distillate on ¼-in. choke.**

**Tulane Gordon's No. 1 W. A. Shofner, 339.5 ft. from N line, 295 ft. from E line of block, D. Tilley Addn., M. Sanches Sur.**
Location.

### Anahuac—Chambers County

**Humble O. & R. Co.'s No. 3 Clark, 1,403 ft. E of most easterly W line, 2,604 ft. W of No. 1, 466 ft. N of S line, H.T.&C. Sur.**
Rig up.

**Humble Oil Co.'s No. 1-B Meddleton, 466 ft. out of SE cor. of Sec. 56, H.&T.C. Sur.**
Location.

**Humble Oil & Refg. Co.'s No. 5 Meddleton, 464 ft. W of E line, 1,339 ft. S of N line of Sec. 56, H.&T.C. Sur.**
Location.

**Humble Oil & Refg. Co.'s No. 4 Meddleton, 3,085 ft. N of S line, 466 ft. E of W line of Sec. 55, H.&T.C. Survey.**
**T.D. 7,090 ft.; 7-in. csg. at 7,045 ft.; W.O.C.**

Humble O. & R. Co. and Rycade Oil Co.'s No. 1 Engels, 466 ft. out of SE cor. of Sec. 50, H.&T.C. Sur.
10¾-in. csg. at 1,345 ft.; drlg. sdy. shale 3,130 ft.

Humble O. & R. Co.'s No. 2 Broussard, 2,322 ft. E of W line, 2,322 ft. N of S line of Sec. 63, H.&T.C. Sur.
Location.

Mason & McCarthy's No. 2 White, 933 ft. W of No. 1, 466 ft. N of S line of James McGahey Sur.
Derrick.

Sun Oil Co.'s No. 1 White, 466 ft. out of NE cor., 466 ft. W of E line, 2,288 ft. S of N line of James McGahey Sur.
Derrick.

### Barbers Hill—Chambers County

Sun Oil Co.'s No. 7 Higgins, 50 ft. S of N line, 50 ft. W of E line.
T.D. 4,212 ft.; drlg.; sidetracked hole at 4,154 ft.

Sun Oil Co.'s No. 11 Chambers County, half way between and in line with Nos. 9 and 10.
Drlg. shale 5,030 ft.

Texas Gulf Prod. Co.'s No. 25-B Kirby, 75 ft. S of N line of Kirby "B" Lease, S offset to No. 2 Fitzgerald.
Drlg. sand and lime at 4,606 ft.

Yount Lee Oil Co.'s No. 30 Chambers County School Land, 50 ft. N of S line, direct offset to Sun Oil Co.'s No. 11.
Drlg. oil sand at 3,855 ft.

### Big Creek—Fort Bend

Trans State Oil Co.'s No. 1 B. J. Wheat, 108 ft. N of S cor. of J. F. Ahlers lease and 88 ft. E at right angles, W. Young Sur.
Top sand 3,422 ft.; coring, 3,428 ft.; no report.

### Blue Ridge—Fort Bend County

Mills-Bennett Prod. Co.'s No. 3 L. W. Lusher, Thomas Habermacher Sur.
Drlg. shale 4,312 ft.

### Boling—Fort Bend County

S. A. Brewster's No. 2 H. R. Farmer, James Scott Sur.
Rig up.

Sun Oil Co.'s No. 1 H. R. Farmer, 103 ft. from N line, 359.2 ft. from W line of 100-ac. tract, James Scott League Sur.
Abandoned 4,300 ft.

Texas Co.'s No. 13 Anne Taylor, 150 ft. N at R/A of 10-ac. tract, S. F. Austin League.
Derrick.

### Orchard—Fort Bend County

Gulf Prod. Co.'s No. 44 Moore, 500 ft. NW of No. 42, Leo Burknapp Sur.
S.D. 611 ft.

Gulf Prod. Co.'s No. 43 Moore, 350 ft. E along S line of SW cor. of E.M.&G. Co. Sur. and 740 ft. N at R/A to said line of lease, 350 ft. E of No. 3 Moore.
6,652 ft.; 7-in. csg. 6,584 ft.

### Thompson—Fort Bend County

Humble O. & R. Co.'s No. 3-B Gubbels, 986 ft. N of No. 1, 466 ft. W of E line, S. Kennedy Sur.
T.D. 5,350 ft.; top sand 5,281 ft.; 7-in. csg. at 5,212 ft.; W.O.C.

Humble O. & R. Co.'s No. 2 Gubbels, 500 ft. E of W line, 500 ft. N of S line, 638 ft. W of No. 4-B Gubbels, S. Kennedy Sur.
T.D. 5,374 ft.; I.P. 10 bbls. per hour on ⅝-in. choke, 100 lbs. T.P.

### High Island—Galveston County

Yount Lee Oil Co.'s No. 1-B Gordon & Viterbo, 62.5 ft. from E line, 50 ft. from S line of Blk 1, M Dunman Sur.
Coring sand 4,460 ft.

Yount-Lee Oil Co.'s No. 48 Cade, 900 ft. SE and 150 ft. NE of SW corner Block 4, Fitzsimmons Survey.
Spudded.

Yount Lee Oil Co.'s No. 3 Maco-Stewart, 202 ft. S of No. 2 Stewart and 122 ft. W of E line of 7.73 acre tract, D. Dunman Survey.
Rigging up.

Yount Lee Oil Co.'s No. 1-C Geo. Smith, D. Dunman Sur.
T.D. 5,126 ft.; 7-in. csg. at 4,993 ft.

Yount Lee Oil Co.'s No. 47 Cade, Fitzsimmons Sur.
Coring sand 6,140 ft.

Yount Lee Oil Co.'s No. 2 Lousiafot, 150 ft. due S of No. 1, M. Dunman Sur.
T.D. 4,403 ft.; I.P. 400 bbls. per day.

Yount Lee Oil Co.'s No. 2-A Taylor, 85 ft. W of No. 1, A. Dunman Sur.
T.D. 5,731 ft.; I.P. 335 bbls. per day.

Yount Lee Oil Co.'s No. 46 Cade, 424 ft. SW of No. 35, 424 ft. NW of No. 36, Fitzsimmons Sur.
Testing at 5,860 ft.

### Dickinson—Galveston County

Humble Oil & Refg. Co.'s No. 1 Hanson, 502 ft. from N line and 256 ft. from E line of 15.59 acre tract.
T.D. 8,045 ft.; I.P. 6.8 bbls. per hour on ⅝-in. choke, 150 lbs. T.P.; 700 lbs. C.P.

Humble Oil & Refg. Co.'s No. 6 Maco Stewart, 6,087 ft. S of NE corner, 1,390 ft. W of E line and 1,390 ft. E of W line and 466 ft. N of S line of Stewart 363 acre lease, J. Sellers Survey.
Drlg. shale 7,220 ft.

Humble O. & R. Co.'s No. 5-A Stewart, 466 ft. W of E line of Stewart "A" Lease, 5,500 ft. due S of No. 2-A Stewart, John Sellers Sur.
Rig up.

Humble O. & R. Co.'s No. 1 Bayou Development Co., 375 ft. S of N line and midway between E and W lines of Lot No. 7, John Sellers Sur.
Fishing at 7,312 ft.

Humble O. & R. Co.'s No. 1 E. E. Anderson, 375 ft. N of S line, and midway between E and W lines of Lot No. 4, John Sellers Sur.
Location.

Humble O. & R. Co.'s No. 2-A Maco Stewart, 3,324 ft. S along E line of S bank of Bayou and 566 ft. W of E line at R/A John Sellers Sur.
T.D. 9,181 ft.; P.B. 8,770 ft.; test showed salt water and distillate through ¼-in. choke; T.P. 2,500 lbs., C.P. 2,800 lbs.; P.B. 8,510 ft., perforated csg. 8,464-83 ft. with 20 holes, 2½-in. tubing 8,153 ft.; flowing 5 bbls. per hour on ¼-in. choke; T.P. 2,800 lbs.; C.P. 2,850 lbs.

Pure Oil Co.'s No. 2 J. W. Shelar, 779 ft. N, 182 ft. W of N. I. Shelar, B.B.B. &C. Sur.
Drlg. shale and shells at 5,154 ft.

Stanolind O. & G. Co.'s No. 1 State, 347 varas S of Humble O. & R. Co.'s No. 1 Jones.
Drlg. shale 7,660 ft.

### Arriola—Hardin County

Houston Oil Co.'s No. 7-X fee, 660 ft. 30 deg. 30 ft. SE from No. 1-X.
Drlg. shale 3,155 ft.

Houston Oil Co.'s No. 8 fee, Arriola Sur.
Coring 3,410 ft.

Republic Prod. Co.'s No. 12 fee, 2,599 ft. S of N line, 474 ft. E of W line of E. Arriola Sur.
T.D. 3,728 ft.; pulling liner and screen.

### Batson—Hardin County

John Deering's No. 1 Conzelman, 2,810 ft. E along N line from NW cor. of H. Numm Sur. and 35 ft. at R/A, W. Donaho Sur.
T.D. 5,590 ft., slight show of oil and gas.

John Deering's No. 1 Bullock, 1,000 ft. N, 17 ft. E of middle line of 30-ac. tract, Bullock tract, Dondo Sur.
T.D. 6,294 ft.; hole heaved to 4,944 ft.; S.D.

John Deering's No. 2 Cruse, 200 ft. E and 50 ft. S of No. 1 Cruse, W. Donaho Sur.
Drlg. shale 3,110 ft.

Shell Pet. Corp.'s No. 1 R. O. Jordan Fee, W. Donoho Survey.
Drlg. shale 4,459 ft.

### Pierce Junction—Harris County

J. S. Abercrombie's No. 5 John Ritter, 259 ft. SW of No. 4, 1,047 ft. NE along SE line out of SW cor. of 160-ac. tract, thence 93 ft. NW at R/A, Sec. 51, J. Hamilton Sur.
T.D. 4,898 ft.; 7-in. csg. 4,865 ft.

Gulf Prod. Co.'s No. 11 H. C. Cain, 390 ft. from W line, thence 439 ft. at R/A to N line of 130-ac. tract, Jas. Hamilton Sur. No. 98.
Drlg. shale 6,437 ft.

Gulf Prod. Co.'s No. 40 E. R. Taylor, 89.5 ft. along E line of E. R. Taylor's 560-ac. tract from SW cor., south offset to Hamil & Smith's No. 1 Howe.
T.D. 6,543 ft.; top sand 6,533 ft.; running screen to test.

Hamil & Smith's No. 1 C. W. Mowery, 50 ft. out of NE cor. of 600-ac. tract, Sec. 53, J. Hamilton Sur.
Abd. 7,135 ft.

W. H. Holland et al's No. 1, I.&G.N.R.R., 830 ft. from S line of Jas. Hamilton Sur.
T.D. 3,982 ft. oil sand.

Rio Bravo Oil Co.'s No. 28 Settegast, 1,010 ft. W and 450 ft. N from most southerly SE corner of "B" Lease, J. Kopmen Sur.
Drlg. shale and lime 3,290 ft.

### Humble—Harris County

Sun Oil Co.'s No. 77 River, 50 ft. from W line, 250 ft. due W of No. 75, Robert Dunman Sur.
T.D. 1,090 ft.; I.P. 61 bbls. per day.

Sun Oil Co.'s No. 85 River, Drlg. sand and boulders 829 ft.

Sun Oil Co.'s No. 30 Bender, 2,393 ft. N, 3,080 ft. W of most northerly SE cor. of lease; B. Adams Sur.
Reaming 3,273 ft.

### Mykawa—Harris County

Alpha Pet. Co.'s No. 1 Waggenhausen, C of E½ Lot 10, F. J. Rothas Sur.
T.D. 4,681 ft.; P.B. 4,554 ft.; set whipstock at 2,800 ft.

Danciger O. & R. Co.'s No. 3 Minnetex, 562 ft. due E of No. 1, thence 150 ft. at R/A, Blk. 254, W. H. Lovett Sur.
T.D. 4,836 ft.; 7-in. csg. 4,810 ft.; running screen.

Flannigan Drlg. Co.'s No. 1 Minnetex, 150 ft. out of NE cor. of Blk. 261, Wm. Lovett Sur.
Spudded.

Sterling Oil & Refg. Co.'s No. 2 Williams, 250 ft. from N and E line of Wm. Lovett Sur.
T.D. 4,659 ft.; running 7-in. csg.; rig up to pump.

West Prod. Co.'s No. 2 Irwin, W. E. Walker Sur.
Rig up.

West Prod. Co.'s No. 2 Oden.
Drlg. shale 1,650 ft.

West Prod. Co.'s No. 2 Pratt, 488 ft. from S line, 200 ft. from W line of lease, W. B. Walker Sur.
T.D. 4,540 ft.; 7-in. csg. 4,370 ft.; W.O.C.; I.P. 10 bbls. per hour through ¼-in. choke; T.P. 300 lbs.

West Prod. Co.'s No. 1 W. Lang, John R. Hall Sur., Blk. 7.
T.D. 6,600 ft.; washing to bottom.

### Tomball—Harris County

Humble O. & R. Co.'s No. 10 Reid, 1,544 ft. E of W line, 1,200 ft. S of N line, 933 ft. from No. 7, G. Goodrich Sur.
Drlg. sand 3,327 ft.

Humble O. & R. Co.'s No. 2 Faus, 466 ft. from S line, 1,764 ft. from W line of W. Usener Sur.
T.D. 5,556 ft.; top sand 5,552 ft.; 7-in. csg. at 5,549 ft.; W.O.C.

Humble O. & R. Co.'s No. 1 Lembarger, 328 ft. NE of SW line, 328 ft. SW of NE line, 363 ft. NW of SE line of 20.24-ac. tract in E. Smith Sur.
Drlg. shale 4,660 ft.

Humble O. & R. Co.'s No. 1-B Weindorf, 466 ft. E of W line, 259 ft. S of N line, G. Goodrich Sur.
T.D. 5,577 ft.; top sand 5,573 ft.; 7-in. csg. 5,577 ft.; W.O.C.

Humble O. & R. Co.'s No. 3 Scherer, 389 ft. E of easterly W line, 260 ft. W of E line, 532 ft. NW at R/A to N line of J. House Sur.
T.D. 5,625 ft.; top sand 5,605 ft.; 7-in. csg. at 5,622 ft.; W.O.C.

Shell Pet. Corp.'s No. 2 Theis, 2,383 ft. N and 293 ft. W of SE cor. of lease, J. House Sur.
T.D. 5,592 ft. oil sand; comp., no gauge.

### Vanderbilt—Jackson County

Phillips Pet. Co.'s No. 2 Tuney, 330 ft. each way out of E cor. of 64-ac. tract, or 414 ft. SE of No. 1, R. Musquis Sur.
W.O.C. 1,140 ft.; Gbo.

### Big Hill—Jefferson County

Yount Lee Oil Co.'s No. 1-B Pipkin & Davis, 2,225 ft. from E line and 2,385 ft. from N line of survey, Wm. McFadden Sur.
Drlg. shale 4,810 ft.

### Fannett—Jefferson County

J. S. Aber's No. 1 Junker, 50 ft. by 50 ft. out of NW cor. of Junker 430-ac. tract, W. H. Smith League.
Rigging up.

Gulf Prod. Co.'s No. 5 Junker.
T.D. 5,665 ft.; W.O.C.

### Cleveland—Liberty County

Black Gold Pet. Oil Corp.'s No. 2 R. D. McDonald, 466 ft. W of most westerly E line and 466 ft. N of most northerly S line of survey, 932 ft. W of Gulf Prod. Co.'s No. 7-C Kirby Lbr. Co., T. Devers Sur.
Derrick.

William J. Colegrove et al's No. 1 State School Land & Dev. Co., 446 ft. from W line and 170 ft. from S line of survey, Clayton Harper Sur.
Location.

### Esperson—Liberty County

General Crude's No. 1 Heavaty, 467 ft. out of SE cor. of F. M. Gardner Sur.
Drlg. shale 2,648 ft.

General Crude Oil Co.'s No. 21 Esperson.
T.D. 6,642 ft.; pulling screen to deepen.

General Crude Oil Co.'s No. 10 Davis, 2,000 ft. from E line, 660 ft. from S line of D. Kokernut Sur.
Cut off pipe at 6,820 ft.; fishing; T.D. 8,203 ft.

### Hankamer—Liberty County

Eastman-Ward's No. 1 R. E. Lee, 115 ft. from N line of lease and 76 ft. W of west bank of White Bayou, Geo. Stengler Sur.
Rig up.

Eljean Oil Co.'s No. 2 S. E. Ezzell, 130 ft. from N and S line of 10-ac. lease, Levi Barrow Sur.
Location.

Gulf Prod. Co.'s No. 1-B W. L. Bingle, 159 ft. E along S line of H.&T.C. Sur., thence 378 ft.
Drlg. shale 6,724 ft.

Gulf Prod. Co.'s No. 21 E. W. Boyt, 110 ft. from W line of Amos Allen Sur.
Location.

W. C. Hall's No. 1 Ainsworth, 150 ft. out of NE cor. of 50-ac. tract, Andrew Weaver Sur.
Rig up.

Sterling O. & R. Co.'s No. 1 George Stengler, 100 ft. out of most westerly NE cor. of Geo. Stengler Sur.
Derrick.

Will Strozier et al's No. 1 Ezzell, 700 ft. N of S line, 150 ft. W of E line of Levi Barrow Sur.
Derrick.

Wilson Roach Oil Co.'s No. 2 Marrs-McLean, 513.4 ft. from W line, 100 ft. from E line, Levi Barrow Sur.
T.D. 4,207 ft.; fishing for swab line.

### Hull—Liberty County

Fondren & Snowden's No. 2 Humble-Hooks, 50 ft. from S line, 300 ft. NW of No. 1, J. Devore Sur.
S.D. 802 ft.

### Van Vleck—Matagorda County

Skelly Oil Co.'s No. 1 Turner, 523 ft. E from SW cor. of F. Metzler 135-ac. tract, thence 466 ft. S at R/A in Maria Cummins Sur.
Bldg. derrick.

Skelly Oil Co.'s No. 3 Cobb "B," 2,750 ft. from NW line, 2,900 ft. from SW line of M. Cummins Sur.
T.D. 7,619 ft., washing to bottom every 24 hours.

### Conroe—Montgomery County

Humble Oil & Refg. Co.'s No. 2 Bailey, 3,412 ft. E of easterly W line, 622 ft. N of S line, R. Kuykendall Sur.
10¾-in. csg. 965 ft.; drlg. shale at 3,540 ft.

Sun Oil Co.'s No. 10 Keystone Mills.
Derrick.

Sun Oil Co.'s No. 12 Keystone Mills.
T.D. 5,139 ft.; I.P. 4 bbls. per hour on ¼-in. choke, T.P. 1,250 lbs.; C.P. 1,150 lbs.

Sun Oil Co.'s No. 16 Keystone Mills.
M.I.R.

Sun Oil Co.'s No. 19 Foster.
Drlg. shale 2,416 ft.

### Splendora—Montgomery County

Bryce McCandless et al's No. 1 Texas Long Leaf Lbr. Co., 330 ft. from N and E lines of the W½ of Blk. No. 8, Walker County School Land Sur.
Derrick.

### Orange—Orange County

Trio Oil Co.'s No. 1 D. S. Comier, 69 ft. W of E line and 39 ft. S of N line of 6.82-ac. tract in W. M. Dyson Sur.
S.D. 1,005 ft.

### Fort Neches—Orange County

Texas Co.'s No. 5-BA (Polk), 897.5 ft. S, 850 ft. W from most westerly NE cor. of "B" Lease.
Drlg. shale and lime 5,705 ft.

Texas Co.'s No. 5 Stark, 400 ft. from S and 125 ft. from E line of lease, M. E. Hall Sur.
Drlg. shale 3,958 ft.

Texas Co.'s No. 4-B Polk, 750 ft. S and 1,450 ft. W from NE cor. of lease, Jacob Beaumont Sur.
Location.

Texas Co.'s No. 6-B Polk, 750 ft. S and 250 ft. W from NE cor. of lease, Jacob Beaumont Sur.
Location.

### Livingston—Polk County

Gem Oil Co.'s No. 4 Watt, 660 ft. N of No. 3, 990 ft. from W line of lease, A. Viesca Sur.
Location.

Gem Oil Co.'s No. 6 Davis & Holmes, 652 ft. from W and 662 ft. from N line of survey, A. Viesca Sur.
Rig up.

Hawkeye Pet. Co.'s No. 2 Howard, 365 ft. from E line of lease, 695 ft. N of No. 1, A. Viesca Sur.
10-in. csg. at 405 ft.

Humble Oil & Rfg. Co.'s No. 11 Granbury, 932 ft., SE of No. 10, 466 ft.; SW of NE line of Sec. 10, A. Viesca Sur.
Drlg. shale 3,706 ft.

Humble Oil & Refg. Co.'s No. 12 Granbury, 933 ft. N of No. 9, A. Viesca Sur.
Location.

Kettle & Gymosky's No. 1 Kingsbury, 330 ft. from N and W lines of Blk. 19, A. Viesca Sur.
Total depth 4,362 ft.; 6⅝-in. csg. 4,352 ft.; W.O.C.

Owsby Drlg. Co. No. 3 Pratt, 660 ft. W of No. 2, 330 ft. S of N line, A. Viesca Sur.
T.D. 4,240 ft.; 7-in. csg. at 4,220 ft.

Sun Oil Co.'s No. 6 Pratt, 330 ft. from S line of lease, 660 ft. W of No. 2, A. Viesca Sur.
Location.

### Refugio—Refugio County

Houston Oil Co.'s No. 28 P. H. Rooke, 550 ft. SW of No. 7, 660 ft. NW of No. 22, Thomas Mullen Grant.
Drlg. shale 1,510 ft.

### McFaddin-O'Connor Districts—Victoria and Refugio Counties

Texas Co.'s No. 9 McFaddin, 1,350 ft. N, 2 deg., 45 ft. S from No. 2.
7-in. csg. 6,196 ft.; T.D. 6,276 ft.; P.B. to 4,448 ft.; swbd. S.W.; P.B. 2,472 ft.; testing gas volume.

### Placedo—Victoria County

Eastern States Pet. Co.'s No. 1 Williams, 330 ft. out of S cor. of 130-ac. tract, E. Benavides Sur.
Testing 4,745 ft.

L. A. Gillespie & Superior Oil & Gas Co.'s No. 1 R. W. Brandt, 330 ft. from NE line, 330 ft. from NW line of Tract No. 11, Henderson & Pickering Subd., Wm. Rupley Sur.
Abd. 3,693 ft.

Magnolia Pet. Co.'s No. 1 Henderson & Pickering, E offset to discovery well, Wm. Rupley Sur.
Testing 6,406 ft.

Martex Oil Co.'s No. 1 Mitchell, 330 ft. S of W line, 330 ft. N of W line of 500-ac. tract, E. Benavides Sur.
Rigged up to deepen.

E. L. Smith's No. 1 Lela.
Location.

### Clay Creek—Washington County

Pompy et al's No. 1 Klatte, J. F. Perry League, 150 ft. each way out of NW cor. of 50-ac. tract.
Rig up.

Sun Oil Co.'s No. 15 Janner.
Drlg. plugs 1,521 ft.

### Louise—Wharton County

Pure Oil Co.'s No. 4 Kountze, 990 ft. NE, 990 ft. SE of W corner of 240-ac. tract, Morris & Cummings Sur.
T.D. 5,160 ft.; 7-in. csg. at 5,131 ft.

Pure Oil Co.'s No. 1 J. H. Roberts, 990 ft. SW and 660 ft. SE of N cor. of 80-ac. tract, Morris & Cummings Sur.
Derrick.

Pure Oil Co.'s No. 2 Weever, 1,980 ft. SW, 990 ft. NW of E cor. of Sec. 32, J. M. Brownson Sur.
Drlg. stky. shale 2,175 ft.

Shell Pet. Corp.'s No. 1 A. and E. Steves, 1,400 ft. E and 1,200 ft. S of NW cor. of 1,279.4-ac. lease, J. J. Dillard Sur.
Coring sandy shale 5,334 ft.

### Pickett Ridge—Wharton County

Texas Co.'s No. 1 Riggolets, 150 ft. W and 220 ft. S of NE cor. Sec. 30-17-24.
Drlg. shale and lime 8,026 ft.

### Bayou St. Dennis—Terrebonne Parish

Texas Co.'s No. 2 Bayou St. Dennis, 466

ON YOUR MARK . . . .
GET SET . . .

**GO!....*for greater profits at any distance with***

DARCOVA (Orange Label) the standard for more than 30 years under severe service at all depths.

DARVAL (Blue Label) for service in wells to approximately 2,000 feet in depth.

DARFLEX (Green Label) the popular favorite for wells to 800 feet in depth.

The *original* composition valve cups are manufactured

only by

**DARLING VALVE & MFG. CO.**
Williamsport, Pa.

ft. N and 1,194 ft. W of SE cor. of Sec. 19-17-24.
T.D. 6,479 ft., prepare to sidetrack junk.

## LOUISIANA

### Bay St. Elaine—Terrebonne Parish

Texas Co.'s No. 3-A Pierce, 1,320 ft. N 38 degrees E from discovery well in L.&G. N. Sur. No. 39.
Drlg. sand and boulders, 1,088 ft.

Texas Co.'s No. 3 School Board, Sec. 16-22s-18e.
Location.

Texas Co.'s No. 10 State, 4,550 ft. E and 4,595 ft. S of NW cor. of Sec. 17-22s-18e.
Drlg. sand and shale 5,625 ft.

### Calliou Island—Terrebonne Parish

Texas Co.'s No. 27 State, Sec. 17-23s-20e.
Coring sand 5,143 ft.

Texas Co.'s No. 21 Calliou Island, Sec. 17-23s-20e.
Coring 4,149 ft.

## SOUTH LOUISIANA FIELDS

### Black Bayou—Cameron Parish

Shell Pet. Corp.'s No. 23 Watkins, 1,683 ft. E. 1,825 ft. S of NW cor. Sec. 17-12-12.
W.O.C. 4,611 ft. oil sand.

Shell Pet. Corp.'s No. 24 Watkins, 2,832 ft. W. 695 ft. S of NW cor. Sec. 18-12-12.
Drlg. sand rock 1,832 ft.

Shell Pet. Corp.'s No. 22 Watkins, 2,230 ft. W and 1,340 ft. S of NE cor. Sec. 18-12s-12w.
T.D. 4 416 ft.; running screen and liner to test.

Shell Pet. Corp.'s No. 3 State.
T.D. 7,807 ft., P.B., coring shale 5,983 ft.

### Bosco—Acadia and St. Landry Parishes

Superior Oil Prod. Co.'s No. 3 Prejean, 2,715 ft. S, 898 ft. E of NW cor. of SE¼ of Sec. 34-8s-3e.
T.D. 8,607 ft., 7-in. csg. 8,591 ft.

Superior Oil Prod. Co.'s No. 10 Larcade, 1117 ft. S, 3,345 ft. E of NW cor. of Sec. 35-8s-3e.
Drlg. shale 8,416 ft.

**Superior Oil Prod. Co.'s No. 3 Kahn, 2,668 ft. N and 300 ft. W of SE corner of Sec. 33-8s-3e.**
T.D. 8,695 ft.; 7-in. csg. 8,685 ft.; I.P. 192 bbls. in 24 hours through 12/64-in. choke.

Superior Oil Prod. Co.'s No. 5 Iseringhausen, 2,662 ft. S, 686 ft. E out of NW cor. of Sec. 35-8s-3e.
T.D. 8,709 ft.; 7-in. csg. 8,702 ft.; fishing.

Superior Oil & Prod. Co.'s No. 1 M. Benoit, 1,165 ft. W of SE cor., 2,320 ft. N, Sec 34-8s-3e.
Coring shale 8,415 ft.

Superior Oil & Prod. Co.'s No. 8 Hernandez, 105 ft. E, 219 ft. N of SW cor. of NW¼ Sec. 34-8s-3e.
T.D. 8,620 ft.; 7-in. csg. 8,600 ft.; I.P. 216 bbls. in 10 hours through 16/64-in. choke.

Superior Oil Prod. Co.'s No. 2 Le Blanc, 1,693 ft. S, 937.09 ft. W of NE cor. Sec. 33-8s-3e.
T.D. 8,664 ft.; 7-in. csg. 8,647 ft.; comp., no gauge.

### Darrow—Ascension Parish

Humble O. & R. Co.'s No. 3 Gumble, 850 ft. E from center line of R-W along the Rose-Gumble property, 72 ft. NW at R/A Sec. 33-10s-2e.
Drlg. shale and lime 5,918 ft.

Humble O. & R. Co.'s No. 4 Community, 4,825 ft. from NE cor. and 283 ft. S of N line at R/A. Sec. 33-10s-2w.
Digging cellar.

### Cameron Meadows—Cameron Parish

Magnolia Pet. Co.'s No. 13 Cameron Meadows, Sec. 21-14s-12w.
Drlg. shale 110 ft.

Magnolia Pet. Co.'s No. 12 Cameron Meadows, 422 ft. E of No. 11.
T.D. 2,324 ft.; W.O.C.

Burton Sutton Oil Co.'s No. 4 School Land, Sec. 16-14s-12w.
Derrick.

Burton Sutton Oil Co.'s No. 7 School Land, Sec. 16-14s-12w.
T.D. 4,004 ft.; 7-in. csg. at 2,982 ft.

Texas Co.'s No. 14 State, Sec. 14-12s-9w.
Drlg. rock 5,299 ft.

Texas Co.'s No. 17 State, Twp. 12s-9w.
Drlg. sand, shale and lime 4,820 ft.

### Choctaw Dome—Iberville Parish

Standard Oil Co.'s No. 1 Myrtle, 900 ft. N and 550 ft. W of SE cor. of SW¼ of Sec. 52-9s-11e.
Drlg. shale 3,016 ft.

Zeni Oil Co.'s No. 1 Schwing, Sec. 19-17s-24e.
Rig.

### Dog Lake—Terrebonne Parish

Texas Co.'s No. 11 State, 1,100 ft. N, 2,476 ft. W of SE cor. of Sec. 21-21s-16e.
S.D. 2,014 ft.

### Four Isle—Terrebonne Parish

Texas Co.'s No. 8 La. Land & Expl. Co., 2,177 ft. E, 1,385 ft. S of NW cor. Sec. 24-21s-14e.
Rig up.

Texas Co.'s No. 5 State, 885 ft. S, 2,227 ft. E of NW cor. of Sec. 24-21s-16e.
Location.

### Garden Island Bay—Terrebonne Parish

Texas Co.'s No. 16 Garden Island, Sec. 37-22s-22e.
Drlg. sandy shale 4,092 ft.

Texas Co.'s No. 13 State, 2,291 ft. S and 1,604 ft. W of NE cor. Sec. 107-22-22.
Rig up.

### Gueydan—Vermillion Parish

Pure Oil Co.'s No. 6, Alliance Trust, 667 ft. E, 1,787 ft. S line of lease, Sec. 34-11s-1w.
T.D. 9,543 ft.; unable to get below 4,900 ft.

### Hackberry—Cameron Parish

Gulf Refg. Co.'s No. 19 Erwin, 1,315 ft. W along S line of the SE cor. of Sec. and 960 ft. at R/A to S line, Sec. 12-12-10w.
Drlg. shale 4,820 ft.

Texas Co.'s No. 14 State, 500 ft. SE of No. 13, Sec. 13-12s-10w.
Drlg. rock 5,299 ft.

Texas Co.'s No. 15 State, Sec. 13-12s-10w.
No report.

Yount Lee Oil Co.'s No. 13 Gulf Land, Sec. 14-12s-10w.
Drlg. shale.

Yount Lee Oil Co.'s No. 1-A Gulf Land, 2,000 ft. S and 50 ft. E of the NW cor. of Sec. 22-12-10.
Rig up.

### New Iberia—Iberia Parish

Canal Oil Co.'s No. 4 Bernard, Sec. 54-12s-7e.
Drlg. shale 1,341 ft.

Harrison & Abercrombie's No. 4 Schwing, Sec. 56-12s-7e.
Bldg. derrick.

Heits' No. 1 Sabatoir, 900 ft. N and 1,210 ft. E of SE cor. of Sec. 53-12s-7e.
No report.

Iberia Oil Corp. and Y. D. Spell's No. 2 Bernard, 150 ft. E of No. 1, Sec. 54-12s-7e.
S.D. 3,846 ft.; salt.

### Iowa—Calcasieu and Jeff Davis Parish

Shell Pet. Corp.'s No. 17 Heyd.
Running 7-in. csg., oil sand 6,933 ft.

### Jennings—Acadia Parish

Yount Lee Oil Co.'s No. 15 Houssiere-Latriele.
T.D. 3,100 ft.

### Lake Hermitage—Plaquemines Parish

Humble O. & R. Co.'s No. 1 State Land, 1,080 ft. E, 200 ft. N of Texas Gulf No. 6, Sec. 11-18s-25e.
Rig up.

### Lake Barre—Terrebonne Parish

Texas Co.'s No. 35 Lake Barre, Sec. 40-21s-19e.
Drlg. sandy shale 3,739 ft.

Texas Co.'s No. 36 Lake Barre.
T.D. 3,788 ft.; W.O.C.

### Leesville—Lafourche Parish

Gulf Prod. Co.'s No. 6 Allen Lane, Sec. 26-21s-22e.
T.D. 3,809 ft.; I.P. 250 bbls. per day through 3/16-in. choke.

Texas Co.'s No. 23 Leesville, 975 ft. S, 1,975 ft. W of NW cor. of SW¼ Sec. 26-21-22.
Location.

Texas Co.'s No. 32 Leesville, 890 ft. S, 2,484 ft. W of NE cor. SE¼ Sec. 27-21s-22e.
Rig up.

Texas Co.'s No. 33 Leesville, 1,590 ft. S, 2,484 ft. W of NE cor. SE¼ Sec. 27-1s-22e.
Rig up.

Texas Co.'s No. 36 Leesville, 476 ft. E, 385 ft. E of NW cor. SW¼ Sec. 26-21s-22e.
T.D. 4,206 ft.; 7-in. csg. at 4,170 ft.; W.O.C.

Texas Co.'s No. 37 Leesville, 1,266 ft. N, 103 ft. W of SE cor. NE¼ Sec. 27-21s-22e.
Drlg. sand rock 4,931 ft.

Texas Co.'s No. 27 Leesville.
T.D. 4,567 ft.

### Roanoke—Jefferson Davis Parish

Glassel et al's No. 1-A La. Irrigation Mill Co., Sec. 2-9s-W line.
Drlg. shale 5,600 ft.

Glassel et al's No. 1 La. Irrigation Mill Co., 695.5 ft. E and 475 ft. N of SW cor. Sec. 1-9s-4w.
10¾-in. csg. 2,250 ft.

**Humble Oil & Refg. Co.'s No. 4 Devilbiss, 440 ft. S of N line and 440 ft. W of E line of Sec. 14-9s-4w.**
Drlg. shale and lime 8,452 ft.

Humble O. & R. Co.'s No. 1 Clayton, 2,233 ft. from S line, 440 ft. from E line, Sec. 10-9s-4w.
Coring shale 8,965 ft.

Humble O. & R. Co.'s No. 2 C. N. Taylor, 1,320 ft. E, 440 ft. S of NW cor. of SW¼ Sec. 12-9s-4w.
Rig up.

Humble O. & R. Co.'s No. 1 Nelson Thomas, 880 ft. W of No. 2 Kratzer, 440 ft. N and W of SE cor. of 200-ac. tract.
Drlg. sand and shale 10,267 ft.

Shell Pet. Corp.'s No. 1 Jarnigan, 330 ft. E, 660 ft. S, NW cor. Sec. 12-9s-4w.
Coring shale 10,281 ft.

Shell Pet. Corp.'s No. 1-B Kratzer, 660 ft. N, 330 ft. E of SW cor. of SW¼ Sec. 1-9s-4w.
T.D. 7,807 ft., preparing to make D.S.T.

### Sweet Lake—Calcasieu Parish

Pure Oil Co.'s No. 13 Gulf Land, 800 ft. S, 66 deg. 42 ft. E of No. 12, Sec. 13-13-13.
Rigging up.

### Sulphur—Calcasieu Parish

Union Sulphur Co.'s No. 808 fee.
Drlg. shale 4,810 ft.

Union Sulphur Co.'s No. 812 fee.
Drlg. sandy shale 3,310 ft.

Union Sulphur Co.'s No. 811 fee.
W.O.C. 2,810 ft.

### White Castle—Iberville Parish

Shell Pet. Corp.'s No. 8 Wilbert.
W.O.C. 5,625 ft.

Shell Pet. Corp.'s No. 1 White Castle Shingle Co., 1,320 ft. W, 100 ft. S from NE cor. of lease.
Fishing 5,160 ft.

Shell Pet. Corp.'s No. 1 Adams, 2,340 ft. N, 100 ft. E of SW cor. of lease.
T.D. 8,919 ft.; 7-in. csg. 8,889 ft.; testing csg.

## Miscellaneous Wildcats

## TEXAS

### Austin County

Paul English et al's No. 1 Felix Guhn, 1,000 ft. S, 360 ft. E from NW cor. of 71-ac. tract, D. Chomel Sur., 1 mile SE of Kinney.
Rig up.

R. L. Wheelock et al's No. 1 Nancy Harrigat, 330 ft. each way out of the east cor. of the 78-ac. tract, Benj. Babbitt Sur.
Drlg. shale 2,550 ft.

T. F. Wood et al's No. 1 Trenchman, 330 ft. from SE line of a 50-ac. tract, James Cummins Sur.
S.D. 750 ft.

### Brazoria County

Amerada Pet. Corp.'s No. 2 Houston Farms Dev. Co., 2,150 ft. SE, 5,300 ft. SW of N cor. of B.B.B.&C. Sur., in the Perry & Austin Sur.
Abandoned 5,700 ft.

George Strake's No. 2 Truska, 991 ft. W of No. 1, H.T.&B. Sur., Sec. 7.
S.D. 6,000 ft.

Showers & Moncrief's No. 1 Hughey, 5,500 ft. NW of discovery well, in center of Lot 18, H.T.&B. Sur., Sec. 29, Abst. 292. Location.

Texas Co.'s No. 1 Freeport Sulphur Co., 2,764 ft. N, 1 deg., 40 ft. W and 1,134 ft. S, 88 deg., 20 ft. W of NW cor. of S. F. Austin Sur., Abst. No. 35, being in the Conception Areola Sur.
T.P. 4,544 ft.; P.B. to 3,969 ft.; swabbing; est. 50 bbls. oil mud and B.S. daily.

Quintana Pet. Co.'s No. 1-B G. L. Wood, 2,778 ft. from W line and 5,555 ft. from S line of 1,483-ac. lease, Thomas Alsbury Sur.
Abandoned 6,460 ft.

### Calhoun County

Continental Oil Co.'s No. 2 American National Realty Co., 660 ft. from NW line, 660 ft. from NE line of Sec. 6, Blk. C, Pedro Garcia Sur.
S.D. 6,522 ft.

### Colorado County

Clyde Creighton et al's No. 1 Witte, 150 ft.

**They Don't Come TOUGH ENOUGH!**

Scale and Corrosion Problems in boilers and water cooling systems don't come tough enough for—

SAND BANUM

*"The Entirely Different Boiler and Engine Treatment"*

Because Sand-Banum controls these problems in the same infallible, scientific manner regardless of how "different" their cause!

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SAVE MONEY
... by drilling your
holes straight with
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CLINOGRAPH

This instrument affords a record on paper of drilling progress and accurately records any deviation from the vertical. It operates without the use of dangerous acids—quickly and very inexpensively.

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(3800 Block—Atlantic Ave.)

*(U. S. Patent 1,962,634 and others pending.)*

SYFO CLINOGRAPH
also
SURWEL & H-K Surveying Instruments

S and E of most westerly NW cor. of H. White Sur.
10-in. csg. 341 ft.; T.D. 352 ft.
Coyle & Concord's No. 1 fee, 550 ft. from N line, 1,950 ft. from E line of Sec. 45, I.&G.N. Sur.
10¾-in. csg. 610 ft.; T.D. 698 ft.
Mid-Continent Oil Co.'s No. 1 D. E. Burnhardt-Scherz, 330 ft. out of the most southerly SE cor. of a 270-ac. tract, J. Cummins Sur.
Drlg. shale and lime 1,641 ft.

**Fayette County**

Lewis Franklin's No. 1 V. Dybala, center of 75-ac. lease, A. Thompson Sur.
Location.

**Fort Bend County**

W. A. Shafer et al's No. 1 V. B. Bortash, 693 ft. SW of NE line and 1,003 ft. NW of SE line of Sec. 52, H.&T.C. Sur.
S.D. 2,900 ft.
George White et al's No. 1 M. M. Cravins, 1,000 ft. from N, 300 ft. W of SW cor. of survey, B.B.B.&C. Sur. No. 8.
Rig up.

**Grimes County**

Dillinger & Hammer's No. 1 L. P. Lane, 150 ft. S of N line and 150 ft. W of E line of 65-ac. tract, R. P. Stewart Sur.
Derrick.
Hubert Holt et al's No. 1 Simon Fuqua, 1,200 ft. N of S line and 400 ft. W of E line of 177-ac. lease and survey, Moses Evans Sur.
S.D. 3,080 ft.
Dr. Marshall et al's No. 1-B Todd, 300 ft. from E line and 175 ft. from N line of 150-ac. tract in extreme NW cor. of county (25 ft. N of No. 1).
S.D. 2,815 ft.
Patton et al's No. 1 Yeager, 1,000 ft. W of E line, 170 ft. S of N line of 53-ac. tract and survey, A. Ruseolle Sur., NW of Iola Sur.
S.D. 1,000 ft.

**Harris County**

Cockburn Oil Co.'s No. 1 R. E. Brooks, 330 ft. N of N bank of Bayou, 330 ft. from WL of R. E. Brooks, "A" tract.
Rig up.
Graham & Gardner's No. 1 Hager, 150 ft. out of SE cor. of 736.8-ac. tract, J. W. Clepton Sur.
T.D. 6,010 ft.; Abd.
C. C. Foster et al's No. 1 H. K. Johnson, 2,000 ft. from S line and C of E and W lines of G.C.&S.F. Sur.
Drilled 25 ft. and S.D.
Stanolind Oil & Gas Co.'s No. 1 F. J. Burkey, C of Lot 15, Blk. 105, H.T.&B. Sur. No. 5.
Location.
Stanolind Oil & Gas Co.'s No. 1 C. F. Gibson, C of Lot 9, Blk. 41, H.T.&B. Sur. No. 5.
Location.
Stanolind Oil & Gas Co.'s No. 1 J. W. Horlow, C of Lot 10, Blk. 82, H.T.&B. Sur. No. 5.
Location.
Stanolind Oil & Gas Co.'s No. 1 Ed Wells, C of Lot 3, Blk. 16, H.T.&B. Sur. No. 5.
Location.
Stanolind O. & G. Co.'s No. 1 First Natl. Bank of Houston, 950 ft. from NE line, 990 ft. from SE line of 119.6-ac. tract, Callahan and Vance Sur.
Drlg. shale 2,237 ft.
E. E. Young, tr.'s No. 2 P. S. Griffith, 3,476 ft. S of N line, 2,030 ft. E of W line of A. R. Bodman Sur.
S.D. 1,465 ft.

**Jackson County**

A. M. Harris' No. 1 Whitley, 800 ft. out of SE cor. of F. G. Keller Sur.
Location.
Shell Pet. Corp.'s No. 1 Combs, 466 ft. EW line, 2,500 ft. NE line of 242.75-ac. tract, M.&C. Sur., Sec. 33.
Drlg. shale 4,517 ft.

**Jasper County**

Marathon Oil Co.'s No. 1 Jasper County Lumber Co., 330 ft. out of NE cor. of 176.5-ac. tract 5 miles SE of Jasper, T. C. Holmes Sur.
Drlg. shale 3,620 ft.; prepare to core.

**Jefferson County**

Humble O. & R. Co.'s No. 1-B McFaddin, 330 ft. E of W line of 240-ac. tract, 366 ft. NW of Gulf of Mexico, also 50 ft. NW of N of Highway, Sec. 370, C. F. Code Sur.
Drlg. sandy shale 460 ft.
Humble O. & R. Co.'s No. 1 J. T. White, 330 ft. out of SW cor. of T.&N.O.R.R. Sur. No. 370.
Moving in rig.
Sun Oil Co.'s No. 1 Hebert & Braussard, 6,890 ft. NW along SW line and 660 ft. NE at right angles to SW line, B. Blackman Sur., Abst. No. 2.
Drlg. shale 6,510 ft.

**Liberty County**

R. M. Bruner et al's No. 1 N. Bell, 150 ft. from N line and 150 ft. from W line of Bell's 187-ac. tract, H.&T.B. Sur. No. 4.
Rigging up.
Extension Oil Co.'s No. 1 J. A. Lovett, 330 ft. from E and 600 ft. from S line of lease, P. P. Deevers Sur.
S.D. 4,048 ft.
D. H. Furse's No. 1 J. F. Kover, 300 ft. out of SW cor. of 100-ac. tract, J. R. Mayhon Sur.
Location.
Liberty-Independent Oil Co.'s No. 1 J. M. Neal, 3,550 varas from E line and 505 varas from N line of Samuel Strong Sur.
Reaming 4,180 ft.
A. L. Maxwell's No. 1 M. P. Hincliff, 200 ft. from E line and 1,000 ft. from the N line of survey, H.&T.C. Sur., Sec. 10a.
Ran electrical test at 5,569 ft.
Peveto et al's No. 1 Palmer, Joseph Former Sur.
Drlg. shale 2,200 ft.
Thomas et al's No. 1-A Eicke, 660 ft. from W line and 2,350 ft. from S line of tract in Green Sur.
T.D. 5,047 ft.; 6⅝-in. csg. at 5,029 ft.
Turnbull & Irwin's No. 1 Cox, 1,000 ft. from the E line and 200 ft. from S line of 108.2-ac. lease, F. J. G. Smiley Sur.
Location.

**Matagorda County**

Continental Oil Co.'s No. 1 Feife, J. S. Criswell Sur., 3,000 ft. E of W line, 2,800 ft. N of S line of survey.
T.D. 6,073 ft.; 11¾-in. csg. 6,072 ft.; W.O.C.
Dr. Griffith's No. 1 fee, 3,000 ft. from E line and 3,000 ft. from W line of Wm. H. Bell Sur.
Rig up and S.D.
Helmerich & Payne's No. 1 Hawkins, 856 ft. S, 70 deg. W of Cockburn Oil Co.'s No. 6 Hawkins.
Drlg. shale 5,674 ft.
Horace M. Smith, Inc.'s No. 1 Wadsworth ranch, 150 ft. out of S cor. of Lot No. 8, S. R. Fisher Sur.
T.D. 8,418 ft.; preparing to deepen.

**Montgomery County**

Travis Baker et al's No. 1 Foster Estate, 1,200 ft. E of W line and 700 ft. S of N line of Blk. No. 50, J. M. De La Garza Sur.
Derrick.
E. E. Bayland's No. 1 C. S. Atkinson, 220 ft. E of T.&B.B. R.R., and 650 ft. S of N line of Robbins George Sur. on 207-ac. tract N of Pinehurst.
T.D. 5,150 ft.; P.B. 3,248 ft.; made D.S.T. with ¼-in. choke, tested 15 thribbles dry mud and salt water. Abd.
Mid-Texas Oil Co.'s No. 1 Delta Land & Timber Co., 560 varas from W line, 200 varas from S line of Robert F. Oliver Sur.
Spudded.
Paul Sanderson, trustee's No. 1 Texas Long Leaf Lbr. Co., 3,500 ft. W, 1,750 ft. S of NW cor., Wm. Barker Sur.
Abandoned 6,452 ft.
T. T. Word, trustee's No. 1 Delta Land & Timber Co., John Hostetter Sur.
Cored salt water sand at 3,625-53 ft.

**Orange County**

Blue Line Oil Co.'s No. 1 Godwin, Richard Ballew Sur., 300 ft. from E line and 180 ft. from NE line of Godwin 20-ac. tract.
S.D. 2,770 ft.
Ellis Oil Co.'s No. 1 G. W. Pell, 100 ft. from N and 300 ft. from W line of Pell tract in the J. M. Henerie Sur.
S.D. 2,035 ft.

**Polk County**

Howard Daily et al's No. 1 Z. B. Knox, 1,450 ft. W and 1,920 ft. S of NE cor. of F. Chairs Sur., 16 miles NE of Corrigan.
S.D. 60 ft.
J. F. Anderson's No. 1 E. L. Duke (O.W. D.D.), 400 ft. from E and 350 ft. from S of SW cor. of P. Michelick 50-ac. lease, Abst. 59, P. J. Mineral Sur.
Waiting on a new mud pump; T.D. 5,304 ft.
J. W. Leggett et al's No. 1 Bergman, C of 294-ac. tract, or 1,100 ft. W of H.E.&W.T. R.R., J. T. Pinkney Sur.
S.D. 4,000 ft.
Dick Schwab's No. 1 Lynch, 330 ft. out of NW cor. of 200-ac. tract in the George Jameson Sur.
Location.

**Refugio County**

Cecil Hagen et al's No. 1 Edith Clarkson 1,786 ft. from N line, 3,820 ft. from E line of J. Coughlin Sur.
Location.

**Robertson County**

H. L. Patton's No. 1 H. Ely, located on a 616-ac. tract, A. Manchola Sur.
S.D. 3,820 ft.

**San Jacinto County**

Ralph Sturam et al's No. 1 R. B. Love et al, 475 ft. S of N line and 2,000 ft. W of E line of 177-ac. tract, Drury McGee Sur.
Moving in rig.

**Trinity County**

Gulf Prod. Co.'s No. 4 Trinity, 4,539 ft. N along W line of SW cor. of Sur. and 330 ft. E at right angles to said line.
Drlg. shale 3,000 ft.

**Wharton County**

Novarro Oil Co.'s No. 1 Schoellman, 330 ft. S of S and E lines, 1,238 ft. from W line of Nasario Mansha Sur.
Rig.
Sterling Oil & Refg. Co.'s No. 1 Frank Janik Sr., 1,859 ft. from N line, 467 ft. W from SE cor. of Janik tract, Johathan Scott Sur.
Drlg. shale 2,626 ft.

## SOUTH LOUISIANA

**Acadia County**

Continental Oil Co.'s No. 1 T. Ortego, 990 ft. S, 500 ft. E of NW cor. SW¼ Sec. 28-7s-2w.
T.D. 8,308 ft., oil sand; 7-in. csg. 8,297 ft.

**Avoyelles Parish**

Southern State Pet. Co.'s No. 1 Boyette, 330 ft. N and 330 ft. E of SW cor. Sec. 28-3n-5e.
Temp. abd. 3,887 ft.

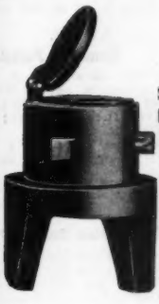
*Clean* WELLS
*QUICKLY—*
*ECONOMICALLY*

*Pays for itself*
*on the first well cleaned*

MILLER

COMBINATION
BAILER & SAND PUMP

Increase your profits per well by cleaning with a MILLER Sand Pump and increasing production. This tool has won world wide acceptance—cleans faster, lasts longer and costs less than any tool of its kind. The enormous suction created by the plunger action enables it to pick up a load that cannot be picked up with a common bailer. Specify the MILLER, it will pay for itself in YOUR first well cleaned!



**SAND BOTTOM**
Used to quickly remove loose material. Especially recommended after a shot or after tools are run.

**BAILER BOTTOM**
With the Bailer Bottom installed the Miller is changed to a Bailer giving you a combination of either a Bailer or Sand Pump in one tool.

The MILLER is made in diameters of 2½, 3, 3½, 4, 4¼, 5 5½, 7 and 9 inches and lengths of 20, 25 and 30 feet. NEW Style Rope Socket Neck Bail allows pump to be disconnected from wire line without cutting the line.

*Miller*
SAND PUMP CO.
*General Offices and Plant:*
Sapulpa, Oklahoma, U.S.A.
*Branch:* Kilgore, Texas

**CHISEL (In Pump)**
Its chisel shape breaks up tightly packed sands, often eliminating the use of tools.

### Beauregard Parish

**Richardson & Martin's No. 1 Southwest Lbr. Co.**
**Location.**

### Calcasieu Parish

**Fred Oil Co.'s No. 2 Faist, 362 ft. E and 33 ft. S of NW cor. SE¼ Sec. 24-8s-10w.**
S.D. 3,575 ft.

**Fohs Oil Co.'s No. 1 Airhart, 275 ft. W and S of NE cor. SW¼ SE¼ Sec. 14-9s-8w.**
Reaming 7,668 ft.

**Nicholas McCaleb's No. 1 Grey, 2,300 ft. S, 1,200 ft. E of NW cor. Sec. 22-8s-13w.**
Drlg. gumbo 1,555 ft.

Texas Co.'s No. 12 State, 2,311 ft. N, 1,906 ft. E of SW cor. of Sec. 12-9s-8w.
Location.

**Texas Co.'s No. 5 Nickerson, 2,826 ft. N, 3,192 ft. W of SE cor. of Sec. 12-10s-8w.**
Drlg. shale 6,530 ft.

**Texas Co.'s No. 6 Nickerson, 287 ft. N, 289 ft. W of SE cor. of NW¼ Sec. 12-10s-8w.**
Location.

Union Sulphur Co.'s No. 1 Prairie Land & Canal Co., 1,212 ft. S, 610 ft. W of NE cor. of Sec. 1-11s-9w.
Location.

**Union Sulphur Co.'s No. 12 State.**
Drlg. sand and gravel 446 ft.

**Union Sulphur Co.'s No. 3 Castle, 1,250 ft. W, 150 ft. N of SE cor. of NW¼ Sec. 14-9s-8w.**
Drlg. shale and lime 6,340 ft.

**Union Sulphur Co.'s No. 3 Mayo-Reeves, 1,064 ft. S and 1,041 ft. E of NW cor. of Sec. 12-9-8.**
T.D. 6,778 ft.; P.B. to 5,942 ft.; W.O.C.

**Union Sulphur Co.'s No. 3 Powell, 1,383 ft. S, 2,901 ft. E of NW cor. Sec. 13-9s-8w.**
Location.

**Union Sulphur Co.'s No. 11 State, 3,127 ft. S, 1,539 ft. E of NW corner of Sec. 12-9s-8w.**
T.D. 6,744 ft.; running csg. to test.

**Union Sulphur Co.'s No. 2 Mayo Reeves.**
Drlg. shale 6,395 ft.

**Union Sulphur Co.'s No. 7 State, 1,316 ft. N and 199 ft. E of the SW cor. of Sec. 12-9s-8w.**
Location.

**Union Sulphur Co.'s No. 9 State, NW offset to Texas Co.'s No. 2 Nickerson.**
T.D. 6,755 ft.; washed to 6,760 ft.; preparing to test.

**Wheeler Oil Corp.'s No. 1 School Lot, 1,703 ft. E, 1,325 ft. N of SW cor. Sec. 16-9s-7w.**
Drlg. shale 3,891 ft.

### Cameron Parish

**Magnolia Pet. Co.'s No. 1 J. B. Broussard, 330 ft. E and S, out of NW cor. of the SW¼ of SE¼ of Sec. 13-12s-9w.**
**T.D. 7,830 ft.; stuck drill stem second time, fishing.**

**Steinberger Pet. Co.'s No. 1 Drew, 330 ft. out of NW cor. NE¼ of Sec. 26-16s-11w.**
Location.

Southern Sulphur Co.'s No. 1 State, Sec. 29-15s-10w.
S.D. 3,215 ft.

### East Baton Rouge Parish

**Superior Oil & Prod. Co.'s No. 1 Duplanter-Community, 1,500 ft. westerly along the N line from the NE cor. of D. A. and E. A. Duplanter's 130.7-ac. tract, thence 230 ft. at R/A.**
T.D. 7,741 ft.; drlg. sandy shale in sidetracked hole, 5,990 ft.

### East Feliciana Parish

**Thompson Creek Oil Co.'s No. 1 Fannie Noland, 2,640 ft. E and 1,580 ft. N of SW cor. Sec. 76.**
**S.D. 1,589 ft.**

### Evangeline Parish

**Little Pigeon Oil Co.'s No. 1 McHugh, 1,980 ft. S, 229 ft. W of the NE cor. Sec. 36-12s-10e.**
**S.D. 2,165 ft.**

### Iberia Parish

Jefferson Lake Oil Co.'s No. 1 State, Twp. 13s-5e.
Drlg. shale 1,869 ft.

Little Pigeon Oil Co.'s No. 1 McHugh.
S.D. 2,165 ft.

**Meade Oil Co.'s No. 1 Hamilton, near town of Lose, in the NW cor. of parish, Sec. 35-12-5.**
S.D. 200 ft.

**Texas Co.'s No. 1 State Pausse Point.**
Drlg. sand and lime 5,188 ft.

J. S. Watterman's No. 1 St. Julian, 75 ft. E of W line of property and 50 ft. N of Lake Poigneur, Sec. 4-12s-5e.
Drlg. shale 1,510 ft.

### Jefferson Davis Parish

**Howard Naylor et al's No. 1 Johnson-Bordeaux, 1,734 ft. N, 52 deg. N, 45 min. E, and 1,353 ft. S, 37 deg. 15 min. E out of SW cor. Sec. 39-10s-3w.**
**S.D. 810 ft.**

### LaFourche Parish

**Coastal Oil Co.'s No. 2 Constantine, 1,476 ft. N, 899 ft. E of SW cor. Sec. 26-21-22e.**
**Location.**

### St. Bernard Parish

**Emerald Pet. Corp.'s "Shell Beach Properties" No. 1, on S edge of Bayou Louis, Sec. 31-13s-15e.**
**T.D. 7,385 ft.; stuck drill stem; P.B. to 1,300 ft.; to sidetrack.**

### St. Martin Parish

**Texas Co.'s No. 7 St. Martin Land, 2,642 ft. N, 500 ft. W of SE cor. of Sec. 17-8s-7e.**
Drlg. sandy shale 7,914 ft.

### Plaquemines Parish

**Southern Sulphur Co.'s No. 1 Manhattan Fruit Co.**
**Rigging up.**

Venice Oil Co.'s No. 1 Manhattan Fruit, Sec. 26-21s-30e.
S.D. 339 ft.

### Vermillion Parish

**Delcambre & Shelton's No. 1 Adam Delcambra, south degrees E, 825 ft. from most northerly cor. of irregular Sec. 63-17-5.**
S.D. 1,500 ft.

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## LA.-ARK. WILDCATS

(Rotary operations unless otherwise designated)

## NORTH LOUISIANA

### Avoyelles Parish

Bell Oil Co.'s No. 2 Thompson-Koltz, 450 ft. S, 350 ft. E, NW cor. Sec. 11-2n-5e.
Partly R.U. and S.D.

Southern Star Pet. Co.'s No. 1 O. G. Boyette, Sec. 28-3-5e.
S.D. 3,875 ft.

### Bossier Parish

Bossier O. & G. Co.'s No. 3 Sherrill, 330 ft. N and W, SE cor. Sec. 13-19-12.
Drlg. 1,485 ft.

W. A. Kirkland's No. 1 Jarrett & McKeller, 330 ft. N and W, S cor. NW NW Sec. 3-21-13.
Drlg. 2,570 ft.

Leonard Co.'s No. 1 Pearson, 250 ft. S and E of C Sec. 22-21-14.
**T.A. 2,421 ft.**

W. E. Neil's No. 1 Curtis Plant, Sec. 19-17-12.
Set 12-in. 200 ft.

Plain Dealing Synd.'s No. 1 Dodson, 330 ft. S and E, NW cor. SW SE Sec. 25-23-13.
Drlg. 1,910 ft.

Producers O. & G. Co.'s No. 1 Edwards, 660 ft. N and W, SE cor. Sec. 27-18-11.
Set 12½-in. 208 ft.

R. L. Skidmore et al's No. 1 Davis, Sec. 12-18-13.
Arranging to test 2,250 ft.

### Caddo Parish

Nick Babare's No. 2 Gibbs, 175 ft. E, 275 ft. S. NW cor. NE SE Sec. 16-20-15.
Set 6-in. 2,172 ft.

J. Ed Bailey, tr.'s No. 1 Hartzo, NW cor. NE NW Sec. 28-22-16.
S.D. 1,226 ft.

Cal-La. Devel. Co.'s No. 1 Glassell, NW NE Sec. 11-19-15.
Set 10-in. 40 ft.

Holly Oil Co.'s No. 1 Thigpen & Herold, Sec. 15-20-15.
S.D. 2,223 ft.

F. D. Hyde's No. 1 Thigpen & Herold, 350 ft. S and E. C Sec. 5-15-15.
S.D. 1,175 ft.

A. D. King, tr.'s No. 1 Roach, 641 ft. E, 375 ft. N, SW cor. SE Sec. 4-14-16.
Tested S.W.; arranging to deepen from 2,712 ft.

Leonard Co.'s No. 1 G. Muslow, C NW SE Sec. 17-20-15.
Set 10-in. 50 ft.; drlg. 295 ft.

Leonard Co.'s No. 2 Dickinson, 1,650 ft. E. 1,320 ft. S. NW cor. Sec. 36-21-15.
Bailing to test 2,280 ft.

Leonard Co.'s No. 1 Muslow, NE cor. NW NE Sec. 9-20-15.
Set 7-in. 2,140 ft.; drlg. 2,188 ft.

Leonard Co.'s No. 1 M. A. Dickson, 1,650 ft. S. 1,260 ft. E. NW cor. Sec. 36-21-15.
Comp.; pumping 45 bbls. at 2,234 ft.

Leonard Co.'s No. 2 Green, SW SW Sec. 8-20-15.
Comp.; 250,000 ft. gas, 825 ft.

Murray Oil Co.'s No. 2 Noel, 495 ft. S, 735 ft. E. NW cor. SW Sec. 15-20-15.
Set 6-in. 2,131 ft.

Press & Lambert's No. 2 Hughes, 350 ft. N and W of C Sec. 15-20-15.
Set 6-in. 2,197 ft.

Recovery Oil Co.'s No. 1 W. L. Sibley, Sec. 15-19-14.
Arranging to set csg. 2,448 ft.

A. C. Scott et al's No. 1 Noel Est., 330 ft. S and E. NW cor. Sec. 22-20-15.
W.O.S.R. 2,261 ft.

Shreveport Oil Corp.'s No. 5-B Muslow, Sec. 4-20-15.,
W.O.S.R. 2,140 ft.

Simplex Oil Co.'s No. 7 Thomas, 200 ft. N and E of C Sec. 15-20-15.
W.O.S.R. 2,202 ft.

Texas Co.'s No. 2 Thigpen, 300 ft. S and E. C Sec. 15-20-15.
Set 6-in. 2,182 ft.

C. A. Tooke's No. 1 Kinheman, 581 ft. S, 126 ft. W, NE cor. NW SW Sec. 15-20-15.
Rigging up.

### Caldwell Parish

Critchell & Woods' No. 1 Kraft, 230 ft. N and W, SE cor. NW NE Sec. 18-11-3e.
Dry and abd. 1,935 ft.

G. D. Davis' No. 1 La.-Central Lbr. Co., Sec. 14-11-3e.
S.D. 1,800 ft.

G. W. Zeigan et al's No. 1 La.-Central Lbr. Co., 175 ft. S and E. NW cor. SW SW Sec. 25-13-3e.
S.D. 1,200 ft.

### Catahoula Parish

McIntyre et al's No. 1 Tensas, 1,740 ft. S, 990 ft. E. NW cor. Sec. 18-10-6e.
S.D. 200 ft.

### Claiborne Parish

E. T. Oakes' No. 1 H. W. Patton Est., 660 ft. S and W. NE cor. Sec. 1-20-5w.
Coring 2,035 ft.

### Desoto Parish

E. B. Bird et al's No. 1 J. H. Johns, 330 ft. N and W, center Sec. 20-14-6.
S.D.; W.O. 2,630 ft.

DeSoto Pet. Co.'s No. 1 B. Y. Wemple, C S½ SE NE SW Sec. 14-12-11.
Arranging to set csg. 2,590 ft.

P. G. Fraley et al's No. 1 G. R. Stell, 330 ft. S and W, NE cor. Sec. 5-12-16.
R.U. and S.D.

**Hunter Co.'s No. 1 DeSoto, 660 ft. S, 1,320 ft. E, NW cor. Sec. 29-12-14.**
Comp.; 16,400,000 ft. gas 2,847 ft.

Leslie Prod. Co.'s No. 1 Ramsey, 150 ft. N and W of C Sec. 36-11-11.
Set 10-in. 45 ft.

National Oils, Inc.'s No. 1 B. Y. Wemple, NW SW Sec. 14-12-11.
S.D. 120 ft.

C. T. Ruffins' No. 1 Lee, 400 ft. S, 334 ft. E, NW cor. SW Sec. 33-14-13.
Comp.; pumping 20 bbls., 2,542 ft.

M. L. Stephens' No. 1 Alston, 345 ft. S, 270 ft. W of C Sec. 11-11-16.
Set 10-in. 40 ft.; drlg. 375 ft.

### East Carroll Parish

Century Oil & Drlg. Co.'s No. 1 Olive Dell, 660 ft. S, 300 ft. W, NE cor. Sec. 56-21-21e.
Drlg. 2,450 ft.

### Grant Parish

Alexander et al's No. 1 Maxwell, Sec. 9-9-1e.
Rigging up.

### Jackson Parish

American Liberty Oil Co.'s No. 1 Lusk, C NE NE Sec. 1-16-1w.
S.D. 3,827 ft.

### La Salle Parish

Fred W. Hensley's No. 1 Urania, Sec. 7-10-2e.
Rigging up.

H. L. Hunt, Inc.'s No. 1-A King, 225 ft. S, 210 ft. E, NW cor. NE NW Sec. 36-10-1e.
Recmtd. 6-in. 1,524 ft.

### Lincoln Parish

Herman L. Brown's No. 1 Monstead, 1,320 ft. S, 660 ft. E of C Sec. 10-17-4w.
Drlg. 50 ft.

### Madison Parish

San. Land & Exploration Co.'s No. 1 Delta Land Co., Sec. 1-17-12e.
S.D. 1,980 ft.

### Morehouse Parish

J. H. Gibson, tr.'s No. 1 Thomas, 330 ft. S and W, NE cor. Sec. 16-22-7e.
S.D. 2,270 ft.

Zeiger & Bacon's No. 2 Crossett Lbr. Co., 3,870 ft. N, 505 ft. E, SE cor. SE SW of Sec. 36, in Sec. 41.
S.D. 50 ft.

### Ouachita Parish

American Liberty Oil Co.'s No. 1 Golson, C NW Sec. 25-17-1e.
Drlg. 3,770 ft.

Ark.-La. Gas Co.'s No. 9 McEnery, 1,270 ft. N, 660 ft. E, SW cor. Sec. 21-19-4e.
Rigging up.

J. E. Farrell & Co.'s No. 5 State of La., 1,693 ft. E, 125 ft. N, N¼ cor. Sec. 22 in Sec. 49-20-4e.
Rigging up.

Maury Drlg. Co.'s No. 5 Frierson, 660 ft. N, 10 ft. E, SW cor. NW Sec. 29-19-4e.
Set 10-in. 180 ft.; set 6-in. 2,140 ft.; comp. 1,363,000 ft. gas 2,151 ft.

Pioneer Gas Co.'s No. 1 Filhoil, 2,436 ft. N, 307 ft. W, common cor. Sec. 11-18-4e.
Comp. 3,376,000 ft. gas 2,215 ft.

### Natchitoches Parish

Clyde Crichton's No. 1 Friedman Est., 406 ft. N, 428 ft. E, SW cor. Sec. 52-7-6.
**Arranging run Schlumberger 2,560 ft.**

Ab Jones' No. 1 Brown Lbr. Co., 400 ft. N, 330 ft. W, SE cor. Sec. 5-10-10.
S.D. 1,033 ft.

B. E. Taylor's No. 1 DeBlieux, 1,395 ft. E, 150 ft. S, NW cor. Sec. 33-10-7.
Set 12½-in. 186 ft.

### Red River Parish

J. S. Tuffree's No. 1 Wilkinson, 1,320 ft. S and W, NE cor. Sec. 11-12-11.
S.D. 1,395 ft.

### Sabine Parish

G. H. Collins' No. 1-C Cranford, 330 ft. S and E, NW cor. SW NW Sec. 28-9-13.
Tested S.W. 2,077 ft.

Hill Myers' No. 1 Magness, Sec. 30-9-13.
Set 10-in. 45 ft.

M. T. Hines' No. 1 J. B. Hill, SW NE Sec. 4-6-11.
Arrng. case off S.W. 3,012 ft.

Jack Lent's No. 1 Williams, Sec. 13-7-11.
S.D. 1,820 ft.

Lee Whitehead et al's No. 2 Frost Lbr. Ind., Sec. 29-9-13.
Set 10-in. 30 ft.; drlg. 300 ft.

**Windsor Oil Co.'s No. 1 Latham, 375 ft. N, 330 ft. E, SW cor. SE SE Sec. 16-9-13.**
Comp.; pumping 200 bbls., 1,982 ft.

### Union Parish

Carbons Consolidated's No. 2 Feazel, 330 ft. S, 660 ft. E, C Sec. 8-20-3e.
Set 10-in., 182 ft.

Crescent Drlg. Co.'s No. 1 Woolie, SE cor. NW NW Sec. 34-19-1e.
Dry and abd. 3,002 ft.

Southern Prod. Co.'s No. 1 Clark, 500 ft. N and W, SE cor. NW NW Sec. 17-23-1e.
**S.D. 3,296 ft.**

United Carbon Co.'s No. 1 Schwab, 1,320 ft. S and 660 ft. E. NW cor. Sec. 7-20-4e.
Set 8-in. 765 ft.

### Webster Parish

Burnett et al's No. 1 Fulbright, NE NE Sec. 1-18-10.
Rigging up.

## ARKANSAS

### Arkansas County

Grand Prairie Realty Co.'s No. 2 Fischer, 412 ft. S, 12 ft. W, NE cor. NW NW Sec. 6-6-4w.
W.O. csg. 118 ft.

### Ashley County

Glenn E. McFaddin et al's No. 1 Boreine Farms, 660 ft. S and W, NE cor. Sec. 1-18-8.
S.D. 2,800 ft.

Texas-Seaboard Oil Co.'s No. 1 fee, C NW NE Sec. 28-17-4.
Drlg. 1,200 ft.

### Columbia County

J. G. Cubage et al's No. 1 Rhea, 150 ft. N line, 330 ft. E, SW cor. SE SE Sec. 12-17-22.
S.D. 3,150 ft.

Southern States Gas Co.'s No. 1 Piney Woods Lbr. Co., 330 ft. N and E, SW cor. NE NW Sec. 10-20-22.
S.D. 960 ft.

### Hempstead County

A. H. Bagnelle's No. 1 Trattner & Rhinehart, Sec. 2-13-26.
S.D. 1,992 ft.

F. W. Martin's No. 2 Lafferty, C NW Sec. 17-14-24.
Rigging up.

### LaFayette County

Earl F. Fox' No. 2 Coleman Bros., NE NE Sec. 30-16-24.
Moving in rig.

Kamon & Neely's No. 1 Cockran, NW cor. SE SW Sec. 26-19-25.
S.D. 4,450 ft.

Transportation Petroleum Co.'s No. 1 Cockran, 300 ft. S and W, NE cor. SE Sec. 26-19-25.
Rigging up.

### Miller County

M. D. K. Fitzwater's No. 1 E. H. Beck, 150 ft. N and E, SW cor. NW SW Sec. 34-15-26.
W.O.S.R. 2,919 ft.

King Oil Corp.'s No. 1 C. H. Schroder, 200 ft. N, 330 ft. E, SW cor. SW NE Sec. 24-14-28.
S.D. 3,167 ft.

King Oil Corp.'s No. 1 Anderson, 350 ft. E, 200 ft. S, NE cor. SW NE Sec. 16-14-27.
S.D. 2,573 ft.

Magnolia Pet. Co.'s No. 8 Olivet, 336 ft. S and W, NE cor. NW NW Sec. 3-16-26.
W.O.S.R. 2,942 ft.

Frank Roe et al's No. 1 Frost Est., 150 ft. N and W, SE cor. SE SW Sec. 8-15-26.
Set 10-in. 120 ft.

Snowden & Hill's No. 1 E. H. Beck, 255 ft. E and 330 ft. S, NW cor. SW SW Sec. 34-15-26.
Drlg. 1,440 ft.

Lee Timberlake's No. 2 Frost Est., Sec. 27-15-25.
Drlg. 2,010 ft.

### Nevada County

Carnett et al's No. 1 Floyd Munin, C SW Sec. 16-14-22.
S.D. 50 ft.

### Ouachita County

McCullough-Brown, Tr.'s No. 1 Rowe, Sec. 2-12-19.
Drlg. 1,550 ft.

Snow-Black Pet. Co.'s No. 1 Bedford, 680 ft. N and 150 ft. E. SW cor. Sec. 32-11-18.
S.D. 960 ft.

W. O. White's No. 1 Parker Bros., 150 ft. S and E, NW cor. NE NE Sec. 26-13-18.
S.W. and abnd. 1,358 ft.

### Poinsett County

Rockwell Development Co.'s No. 1 W. A. Smith, NE NE Sec. 13-11n-3e.
Drlg. at 675 ft. in gumbo.

### Union County

Gardy Drlg. Co.'s No. 1 Craig, Sec. 35-17-16.
**Testing 2,211 ft.**

Gulf Ref. Co.'s No. 49 L. Werner, 4,620 ft. N, 60 ft. E. SW cor. Sec. 5-16-16.
Coring 7,792 ft.

H. L. Hunt's No. 15 E. F. Gregory, 330 ft. N and W, SE cor. Sec. 10-17-14.
T.A. 3,478 ft.

H. L. Hunt's No. 18 E. F. Gregory, 330 ft. N and E, SW cor. Sec. 11-17-14.
Abnd.; will not drill.

Mrs. R. K. Jones et al's No. 1 Davis, 330 ft. N and W, SE cor. NW NW Sec. 28-16-14.
Arranging to test 3,297 ft.

Marine Oil Co.'s No. 5-E Thompson, Sec. 10-18-13.
Set 7-in. 3,540 ft.

C. E. Murdock's No. 1 Pumphrey, C SW NW NE Sec. 11-17-14.
Derrick.

F. F. Roberts et al's No. 1 Galion Lbr. Co., 330 ft. S and E, NW cor. NW SE Sec. 10-16-14.
Set 10-in. 104 ft.

## MISSISSIPPI

### Amite County

Mineral Resources, Inc.'s No. 1 Anderson, C NE NW Sec. 14-2n-3e.
S.D. 550 ft.

### Bolivar County

White & Jones' No. 1 Bailou, SE SE NW Sec. 17-24n-7w.
Drlg. 1,175 ft.

### Clarke County

L. Beckwith et al's No. 1 Long Bell Lbr. Co., 538 ft. S, 125 ft. W of C Sec. 10-2n-16e.
T.A.; lack of funds.
Clarke County Oil Co.'s No. 1 Dora Butler, C SW SW Sec. 15-2n-16e.
Set 10-in. 63 ft.

### Harrison County

Big Ridge Oil Co.'s No. 1 Hinzin, NE Sec. 13-7s-10w.
S.D.; W.O. 1,100 ft.

### Lauderdale County

Bob Dalton's No. 1 Bounds, Sec. 34-7n-15e.
S.D.; W.O. 1,600 ft.

### Monroe County

P. J. McAlpine's No. 1 Frank Rye, Sec. 15-15s-17w.
T.A. 2,931 ft.

P. J. McAlpine's No. 1 Crook, 1,090 ft. S. 90 ft. W, NE cor. Sec. 15-13s-13w.
Arranging set 6-in. 2,502 ft.

### Rankin County

Cleve Love et al's No. 1 Ascher, 520 ft. S and E, NW cor. NE NE Sec. 18-5n-2e.
Drlg. 2,350 ft.

### Simpson County

Berry Corp.'s No. 2 R. T. Berry, Sec. 33-2n-4e.
T.A. 2,510 ft.

### Warren County

H. W. Elliott et al's No. 2 R. L. Parker, 750 ft. E, 1,570 ft. S, NW cor. Sec. 14-14n-1e.
S.D.; high wtr. 1,600 ft.

### Washington County

Perkins & Dees' No. 1 Lee, 1,500 ft. E, 500 ft. N, SW cor. Sec. 33-15n-3w.
S.D. 2,175 ft.

### Winston County

Jack Vale et al's No. 1 Moody, 713 ft. N, 667 ft. E, SW cor. NW SW Sec. 3-13n-14e.
Arranging set 6-in. 2,250 ft.

## ALABAMA

### Covington County

Geometer Prod. Corp.'s No. 1 Culbreath, SW cor. SW NE Sec. 8-2n-14e.
S.D. 6,300 ft.

### Houston County

Rice O. & G. Co.'s No. 1 Oakley est., SE cor. NW SW Sec. 9-3n-29e.
S.D. 2,776 ft.

### Lamar County

DeSoto O. & G. Corp.'s No. 1 Gardner, Sec. 22-15s-16w.
Drlg. 4,522 ft.

## FLORIDA

### Lake County

Oil Dev. Co. of Florida's No. 1 South Lake, SE SE Sec. 17-24s-25e.
S.D. at 1,946 ft., after coring 75 ft. of lime; awaiting acid treatment.

### Walton County

Geometer Oil Corp.'s No. 2 Walton Land & Timber Co., Sec. 10-1s-19w.
Drlg. core tests on block; R.U. and S.D.

## LA.-ARK. PROVEN
## NORTH LOUISIANA

### Caddo—Bodcau

Haynes Prod. Co.'s No. 1 W. B. Lawton, 1,980 ft. N and E, SW cor. Sec. 14-23-16.
Rigging up.

Haynes Bros. Drlg. Co.'s No. 1 Tyson, 660 ft. S and E of C Sec. 24-23-16.
Drlg. 4,751 ft.

Ark-La Gas Co.'s No. 1 J. S. Teamer, 330 ft. N and 660 ft. W, SE cor. SW SE Sec. 13-23-16.
Set 13⅜-in. 273 ft.

R. W. Norton's No. 1 Caddo Levee Board, 660 ft. N and W, SE cor. NE Sec. 21-23-16.
Rigging up.

O'Brien Brothers' No. 1 Rodessa Oil & Land Co., 660 ft. S and 330 ft. E, NW cor. SW Sec. 14-23-16.
Rigging up.

Pelican Oil & Gasoline Co.'s No. 1 Sexton, 660 ft. S and W, NE cor. SE Sec. 14-23-16.
Set 13⅜-in. 580 ft.; drlg. 617 ft.

D. C. Richardson's No. 1 Caddo School Board, C S line NE SW Sec. 23-23-16.
Derrick.

United Gas Public Service Co.'s No. 1 W. M. Bremer, 1,980 ft. N and 660 ft. E, SW cor. Sec. 22-23-16.
Derrick.

United Gas Public Service Co.'s No. 1 Gibson Est., 660 ft. N, 1,980 ft. W, SE cor. Sec. 15-23-16.
Moving in rig.

United Gas Public Service Co.'s No. 1 Rodessa Oil & Land Co., 1,980 ft. N and 660 ft. W, SE cor. Sec. 15-23-16.
Derrick.

United Gas Public Service Co.'s No. 1 D. F. Barr, 1,320 ft. N, 1,551 ft. W, SE cor. Sec. 29-23-16.
Testing 6,052 ft.

United Gas Public Service Co.'s No. 1 I. L. Young, C E½ SE Sec. 21-23-16.
Testing to gauge, 6,048 ft.

### Sabine Parish—Zwolle

Alexander & Crane's No. 1 Fogman, SE cor. N½ SW NE Sec. 18-7-11.
S.D. 2,655 ft.

Ivan A. Allen's No. 1 La. Long Leaf, 330 ft. N and W, SE cor. NW SE Sec. 12-7-11.
S.D. 2,630 ft.

H. C. Mauiding's No. 1 Davis, 350 ft. N and W, SE cor. NE NE Sec. 2-7-11.
S.D. 150 ft.

K. C. Peterson et al's No. 1 Bowman-Hicks, 330 ft. S and E, NW cor. SW NW Sec. 2-7-9.
Derrick down.

Texas Co.'s No. 1 Mary Cutrer, 666 ft. W, 671 ft. N, SE cor. NE Sec. 11-7-11.
Drlg. 2,744 ft.

Tex.-La.-Ark. Oil Co.'s No. 1 Pickering Lbr. Co., Sec. 3-3-12.
S.D. 2,742 ft.

## EAST TEXAS
(Border Counties)

### Harrison County

R. C. Payne et al's No. 1 Lowery, H. D. Spain Sur.
P.B. to 3,524 ft.

### Marion County

Ed S. Holman's No. 1 Henderson, R. Bennington Sur.
P.B. to 2,443 ft.

### Panola County

R. A. Graddy's No. 1 M. J. McCormick, J. McAdams Sur.
Moving in rig.

George Hudson et al's No. 1 J. F. Nail, C. McGeary Sur.
Set 8-in. 40 ft.; fishing for core bbl. at 2,345 ft.

Geo. Le Grand's No. 1 P. J. Wardleigh, A. Thompson Sur.
Set 10-in. 62 ft.

R. W. Price's No. 1 Crawford, J. A. Williams Sur.
Set 10-in. 64 ft.

Fred Stovall Drlg. Co.'s No. 1 H. D. Ivey, P. Martin H.R.S.
S.D. for csg. 1,980 ft.

### Shelby County

Cliff Stoval's No. 1 Pickering Lbr. Co., C. H. Patterson Sur.
S.D.; rig repair. 1,485 ft.

## CALIFORNIA WILDCATS

### IMPORTANT NORTHERN CALIFORNIA WILDCATS

| Company, well and location— | S.T.R. | Depth | Status: |
|---|---|---|---|
| Shell Oil Co., No. 5 Capitan, Santa Barbara Co. | 5- 4-30 | 2,431 | rd. sh. drlg. |
| Shell Oil Co., No. 6 Capitan, Santa Barbara Co. | 5- 4-30 | .... | bldg. rig |
| Shell Oil Co., No. 7 Capitan, Santa Barbara Co. | 5- 4-30 | .... | grading |
| Shell Oil Co., No. 8 Capitan, Santa Barbara Co. | 5- 4-30 | .... | grading |
| General Pet., No. 15 Capitan, Santa Barbara Co. | 32- 5-30 | 323 | cmtd. 187 |
| Shell Oil Co., No. 1 Goleta, Santa Barbara Co. | 10- 4-29 | 1,697 | hd. sh. drlg. |
| Honolulu Oil Corp., No. 9 Elwood, Santa Barbara Co. | tideland | 3,480 | cleaning out |
| Barnsdall-Rio Grande, No. 12 Elwood, Santa Barbara | tideland | 5,067 | sd. sh. drlg. |
| Barnsdall-Rio Grande, No. 88-1 Elwood, Santa Barbara | tideland | 3,477 | will dpn. |
| Bankline Oil Co., No. 10 Elwood, Santa Barbara Co. | tideland | 3,785 | Sespe drlg. |
| Signal O. & G. Co., No. 4 Elwood, Santa Barbara Co. | tideland | 3,766 | flow 2,790 b.d. |
| Signal O. & G. Co., No. 5 Elwood, Santa Barbara Co. | tideland | 918 | sd. sh. drlg. |
| Pacific Western, No. 15 Elwood, Santa Barbara Co. | tideland | 3,280 | sd. sh. drlg. |
| Union Oil Co., No. 3 Santa Maria, Santa Barbara Co. | 25-10-34 | .... | location |
| Las Posas Pet., No. 1 Las Posas, Ventura Co. | 22- 3-20 | 8,116 | recmtd. 7,255 |
| Calco Pet. Co., No. 1 Las Posas, Ventura Co. | 17- 3-20 | 4,160 | to set csg. |
| Union Oil Co., No. 1 Bardsdale, Ventura Co. | 12- 3-20 | 3,700 | deepening |
| Texas Co., No. 1 Fillmore, Ventura Co. | 29- 4-19 | 178 | sd. drlg. |
| Bankline Oil Co., No. 1 South Mountain, Ventura Co. | 3- 3-19 | .... | rigging up |
| Texas Co., No. 1 South Mountain, Ventura Co. | 4- 3-19 | 7,423 | P.B. 5,200 |
| Paloma Oil Co., No. 1 Susana, Ventura Co. | 12- 2-18 | 2,499 | sd. sh. drlg. |
| Hull, James, No. 1 Susana, Ventura Co. | 2- 2-18 | 98 | sd. drlg. |
| Ventura Expl. Co., No. 1 Saticoy, Ventura Co. | 30- 3-22 | 997 | sd. sh. drlg. |
| Prop. Service Corp., No. 1 Lloyd, Ventura Co. | 24- 3-22 | 8,661 | sd. sh. drlg. |
| General Pet., No. 1 Oxnard, Ventura Co. | 26- 2-22 | 2,321 | sd. sh. drlg. |
| Continental Oil Co., No. 4 San Miguelito, Ventura Co. | 23- 3-24 | 5,530 | hd. sd. drlg. |
| Standard Oil Co., No. 1 Lost Hills, Kern Co. | 2-26-20 | 5,475 | sd. sh. drlg. |
| Cumberland Oil Co., No. 1 Devils Den, Kern Co. | 17-26-18 | 3,263 | will dpn. |
| Continental Oil Co., No. 2 McDonald, Kern Co. | 18-28-20 | 117 | sd. drlg. |
| Belmac Drlg. Co., No. 1 McKittrick, Kern Co. | 22-29-21 | 3,200 | sd. sh. drlg. |
| Big McKittrick Oil Co., No. 1 McKittrick, Kern Co. | 30-30-22 | .... | rigging up |
| General Pet., No. 1 South Belridge, Kern Co. | 30-28-21 | 11,377 | suspended |
| Standard Oil Co., No. 2-A North Belridge, Kern Co. | 36-27-20 | 8,476 | sd. sh. drlg. |
| Standard Oil Co., No. 3 North Belridge, Kern Co. | 36-27-20 | 8,281 | sd. sh. drlg. |
| Belridge Oil Co., No. 32-35 North Belridge, Kern Co. | 35-27-20 | 7,473 | br. sh. drlg. |
| Belridge Oil Co., No. 33-35 North Belridge, Kern Co. | 35-27-20 | 7,071 | br. sh. drlg. |
| Union Oil Co., No. 19 North Belridge, Kern Co. | 36-27-20 | 5,543 | sd. sh. drlg. |
| Union Oil Co., No. 20 North Belridge, Kern Co. | 36-27-20 | 5,456 | sd. sh. drlg. |
| Ohio Oil Co., No. 1 Maricopa Flats, Kern Co. | 11-11-12 | .... | rigging up |
| Woods & Bailey, No. 1 McFarland, Kern Co. | 16-26-26 | 708 | sd. sh. drlg. |
| Republic Pet. Co., No. 1 McFarland, Kern Co. | 20-26-27 | .... | rigging up |
| Cimarron Oil Corp., No. 1 Delano, Kern Co. | 14-25-27 | 2,440 | suspended |
| Standard Oil Co., No. 1 Delano, Kern Co. | 1-25-23 | 2,455 | gas—shut in |
| Standard Oil Co., No. 2 Delano, Kern Co. | 1-25-23 | 3,256 | gas—shut in |
| Standard Oil Co., No. 4 Delano, Kern Co. | 34-24-23 | 2,460 | gas—shut in |
| Trico O. & G. Co., No. 1 Delano, Kern Co. | 3-25-23 | 2,525 | gas well |
| Trico O. & G. Co., No. 3 Delano, Kern Co. | 36-24-22 | 4,835 | suspended |
| Trico O. & G. Co., No. 5 Delano, Kern Co. | 3-25-23 | 2,467 | gas well |
| Baker, Cliff, No. 1 Poso Creek, Kern Co. | 33-27-28 | 1,684 | cleaning out |
| Carrec Oil Co., No. 1 Kern Front, Kern Co. | 10-28-27 | 102 | sd. drlg. |
| Kern River Oilfields, No. 3 Kern Front, Kern Co. | 25-28-27 | 2,105 | pump 338 b.d. |
| Kern River Oilfields, No. 4 Kern Front, Kern Co. | 25-28-27 | .... | rigging up |
| Associated Oil Co., No. 2 Kern Front, Kern Co. | 4-28-27 | 2,503 | cmtd. 2,497 |
| C. C. M. Oil Co., No. 4 Kern Front, Kern Co. | 23-28-27 | 1,892 | cmtd. 1,857 |
| Bishop Oil Co., No. 1 Kern Front, Kern Co. | 26-28-27 | 985 | sd. sh. drlg. |
| Republic Pet., No. 3 Kern Front, Kern Co. | 24-28-27 | 1,761 | sd. sh. drlg. |
| Barnsdall Oil Co., No. 4 Mountain View, Kern Co. | 32-20-29 | 5,212 | redrlg. 4,030 |
| Canal Oil Co., No. 1 Mountain View, Kern Co. | 30-30-29 | 132 | sd. drlg. |
| C. C. M. Oil Co., No. 1 Mountain View, Kern Co. | 11-30-28 | 5,943 | sd. sh. drlg. |
| Texas Co., No. 5 Mountain View, Kern Co. | 15-30-28 | 5,501 | completing |
| Hogan, Dana, No. 1 Mountain View, Kern Co. | 32-30-29 | .... | rigging up |
| Union Oil Co., No. 8 Mountain View, Kern Co. | 23-30-28 | 6,990 | sd. sh. drlg. |
| General Pet., No. 4 Mountain View, Kern Co. | 14-30-28 | 5,628 | pump 45 b.d. |
| Mohawk Oil Co., No. 10 Mountain View, Kern Co. | 30-30-29 | 5,930 | flow 4,200 b.d. |
| Mohawk Oil Co., No. 12 Mountain View, Kern Co. | 30-30-29 | 4,491 | sd. sh. drlg. |
| Mohawk Oil Co., No. 13 Mountain View, Kern Co. | 30-30-29 | .... | rigging up |
| Standard Oil Co., No. 8 Mountain View, Kern Co. | 23-30-28 | 5,595 | flow 697 b.d. |
| Standard Oil Co., No. 9 Mountain View, Kern Co. | 24-30-28 | 5,241 | cmtd. 5,154 |
| Standard Oil Co., No. 10 Mountain View, Kern Co. | 23-30-28 | 4,171 | sd. sh. drlg. |
| Standard Oil Co., No. 11 Mountain View, Kern Co. | 24-30-28 | .... | bldg. rig |
| Wood-Callahan Oil Co., No. 1 Mountain View, Kern | 25-30-28 | 4,330 | sd. sh. drlg. |
| Mountain View Oil Co., No. 1 Mountain View, Kern | 25-30-28 | 5,650 | fishing |
| United Expl. Co., No. 1 Bakersfield, Kern Co. | 23-30-27 | 2,231 | sd. sh. drlg. |
| Jergins Trust Co., No. 9 Edison, Kern Co. | 24-30-29 | 951 | sd. sh. drlg. |
| Monterey Expl. Co., No. 8 Edison, Kern Co. | 14-30-29 | .... | rig suspended |
| Sunday, G. M., No. 1 Edison, Kern Co. | 5-30-30 | 501 | cleaning out |
| Union Oil Co., No. 1 Edison, Kern Co. | 13-30-29 | .... | location |
| Union Oil Co., No. 2 Edison, Kern Co. | 13-30-29 | .... | location |
| General Pet., No. 5 Edison, Kern Co. | 15-30-29 | 3,753 | wet—recmtd. |
| General Pet., No. 6 Edison, Kern Co. | 24-30-29 | 1,525 | sd. sh. drlg. |
| General Pet., No. 7 Edison, Kern Co. | 14-30-29 | .... | bldg. rig |
| Appling, C. E., No. 1 Edison, Kern Co. | 4-30-29 | 3,610 | deepening |
| Berry Oil Co., No. 1 Edison, Kern Co. | 10-30-29 | 3,685 | sd. sh. drlg. |
| Woodward Oil Co., No. 3 Edison, Kern Co. | 36-29-29 | 685 | suspended |
| Woodward Oil Co., No. 4 Edison, Kern Co. | 36-29-29 | 480 | cleaning out |
| General Pet., No. 1 Arvin, Kern Co. | 1-32-29 | 6,654 | sd. sh. drlg. |
| Hall-Baker Co., No. 1 Arvin, Kern Co. | 16-31-30 | 1,276 | suspended |
| Hall-Baker Co., No. 3 Arvin, Kern Co. | 21-31-30 | 1,916 | suspended |
| Hutcheson & Osborne, No. 1 Arvin, Kern Co. | 32-30-30 | 1,100 | cmtd. 871 |
| Milham Expl. Co., No. 1 Buttonwillow, Kern Co. | 6-28-23 | 1,486 | sd. sh. drlg. |
| Superior Oil Co., No. 1 Semi-Tropic, Kern Co. | 23-27-23 | 2,418 | cmtd. 2,318 |
| Superior Oil Co., No. 2 Semi-Tropic, Kern Co. | 34-27-24 | .... | bldg. rig |
| Fullerton Oil Co., No. 1 Semi-Tropic, Kern Co. | 1-27-22 | 2,391 | gas—shut in |
| Fullerton Oil Co., No. 2 Semi-Tropic, Kern Co. | 14-27-23 | 2,463 | gas—shut in |
| Fullerton Oil Co., No. 3 Semi-Tropic, Kern Co. | 9-27-23 | 3,150 | gas—shut in |
| Fullerton Oil Co., No. 4 Semi-Tropic, Kern Co. | 26-27-23 | 2,395 | gas—shut in |
| Fullerton Oil Co., No. 5 Semi-Tropic, Kern Co. | 8-27-25 | 2,347 | gas—shut in |
| Fullerton Oil Co., No. 6 Semi-Tropic, Kern Co. | 25-27-23 | 2,441 | gas—shut in |
| Fullerton Oil Co., No. 7 Semi-Tropic, Kern Co. | 25-27-23 | 2,437 | gas—shut in |
| Fullerton Oil Co., No. 8 Semi-Tropic, Kern Co. | 25-27-23 | .... | bldg. rig |
| Fullerton Oil Co., No. 9 Semi-Tropic, Kern Co. | 26-27-23 | 1,940 | sd. sh. drlg. |
| Fullerton Oil Co., No. 10 Semi-Tropic, Kern Co. | 15-27-23 | 1,762 | sd. sh. drlg. |
| Fullerton Oil Co., No. 11 Semi-Tropic, Kern Co. | 14-27-23 | .... | bldg. rig |
| Standard Oil Co., No. 2 Semi-Tropic, Kern Co. | 5-27-23 | 4,343 | cmtd. 4,305 |
| Standard Oil Co., No. 3 Semi-Tropic, Kern Co. | 7-27-23 | 2,355 | gas—shut in |
| Standard Oil Co., No. 4 Semi-Tropic, Kern Co. | 9-27-23 | 3,242 | P. B. 3,199 |
| Standard Oil Co., No. 5 Semi-Tropic, Kern Co. | 9-27-23 | 4,158 | sd. sh. drlg. |
| Standard Oil Co., No. 6 Semi-Tropic, Kern Co. | 8-27-23 | 2,361 | completing |
| Standard Oil Co., No. 7 Semi-Tropic, Kern Co. | 1-27-22 | 2,721 | sd. sh. drlg. |
| Standard Oil Co., No. 8 Semi-Tropic, Kern Co. | 12-27-22 | 2,426 | gas—shut in |
| Standard Oil Co., No. 9 Semi-Tropic, Kern Co. | 1-27-22 | .... | bldg. rig |
| Standard Oil Co., No. 10 Semi-Tropic, Kern Co. | 17-27-23 | .... | bldg. rig |
| Standard Oil Co., No. 11 Semi-Tropic, Kern Co. | 20-27-24 | .... | location |
| Standard Oil Co., No. 12 Semi-Tropic, Kern Co. | 30-27-24 | .... | location |
| Milham Expl. Co., No. 1 Semi-Tropic, Kern Co. | 15-27-23 | 3,122 | gas—shut in |
| Milham Expl. Co., No. 2 Semi-Tropic, Kern Co. | 15-27-23 | 2,429 | gas—shut in |
| Milham Expl. Co., No. 3 Semi-Tropic, Kern Co. | 15-27-23 | 261 | sd. drlg. |
| Tejon Ridge Oil Co., No. 1 Comanche, Kern Co. | 23-32-23 | 1,830 | suspended |
| Shell Oil Co., No. 1 Buena Vista, Kern Co. | 9-32-25 | 7,843 | hd. sd. drlg. |
| Ohio Oil Co., No. 2 Buena Vista, Kern Co. | 32-31-26 | 1,200 | cmtd. 1,199 |
| Reserve O. & G. Co., No. 1 Tejon, Kern Co. | 2-10-19 | 2,699 | pump 45 b.d. |
| Reserve O. & G. Co., No. 3 Tejon, Kern Co. | 12-10-19 | 1,865 | suspended |
| Silver Gate O. & G. Co., No. 1 Tejon, Kern Co. | 7-10-19 | 1,453 | sd. sh. drlg. |
| Hall-Baker Co., No. 1 Tejon, Kern Co. | 12-11-19 | 985 | sd. sh. drlg. |
| Taft Well Drlg. Co., No. 1 Kreyenhagen, Fresno Co. | 33-22-16 | 3,600 | sd. sh. drlg. |
| Pacific Expl. Co., No. 1 Kreyenhagen, Fresno Co. | 17-21-17 | 311 | cmtd. 310 |
| Union Oil Co., No. 1 Lillis-Kettleman, Fresno Co. | 24-21-16 | 10,944 | redrlg. 9,035 |
| K. N. D. A., No. 54 Kettleman-North, Fresno Co. | 24-21-16 | 6,631 | sd. sh. drlg. |
| Standard Oil Co., No. 2 Kettleman Middle, Kings Co. | 29-23-19 | 7,650 | br. sh. drlg. |
| Pet. Sec., No. 1 Kettleman Middle, Kings Co. | 30-23-19 | 1,195 | sd. sh. drlg. |
| Continental Oil Co., No. 1 Kettleman-South, Kern Co. | 7-25-20 | 7,352 | hd. sh. drlg. |
| Farrel Pet., well No. 1, San Luis Obispo Co. | 18-31-12 | 1,846 | sd. sh. drlg. |
| Willet Oil Co., No. 1 Cholame, San Luis Obispo Co. | 10-25-15 | 3,687 | suspended |
| Kings River Oil Pool, well No. 1, Tulare Co. | 29-16-23 | 3,250 | dry—abd. |
| Commonwealth Consd. Gas, No. 1 Tulare Lake, Kings | 21-22-20 | 2,490 | gas well |
| Commonwealth Consd. Gas, No. 2 Tulare Lake, Kings | 21-22-20 | 710 | suspended |
| Dudley Ridge Dev. Co., No. 1 Dudley Ridge, Kings | 24-30-20 | 1,300 | suspended will cmt. |
| Amerada Pet., No. 1 F. L. D., San Joaquin Co. | 15- 2- 5 | 5,906 | recmt. 5,680 |
| Amerada Pet., No. 2 F. L. D., San Joaquin Co. | 15- 2- 5 | 1,071 | sd. sh. drlg. |
| Pure Oil Co., No. 1 Chowchilla, Madera Co. | 7-10-14 | 8,402 | gas well—idle |
| Northern Counties Pet., No. 1 Tehama, Tehama Co. | 25-24- 3 | 4,767 | hd. sh. drlg. |
| Texas Co., No. 1 Petrolia, Humboldt Co. | 1- 3- 2 | 6,133 | suspended |
| Shell Oil Co., No. 1 Branch, Monterey Co. | 34-24-10 | 4,086 | sd. sh. drlg. |

### IMPORTANT SOUTHERN CALIFORNIA WILDCATS

| Company, well and location— | S.T.R. | Depth | Status: |
|---|---|---|---|
| Republic Pet. Co., No. 1 El Segundo, Los Angeles Co. | 18- 3-14 | 7,098 | hd. sh. drlg. |
| Colly Oil Co., No. 1 El Segundo, Los Angeles Co. | 12- 3-15 | .... | rig, suspended |
| Associated Oil Co., No. 4 Inglewood Deep, Los Angeles | 7- 2-14 | 4,458 | P.B. 2,700 |
| Scientix Oil Co., No. 1 Inglewood Deep, Los Angeles | 7- 2-14 | 4,590 | suspended |
| Standard Oil Co., No. 7 Inglewood Deep, Los Angeles | 17- 2-14 | 3,726 | sd. sh. drlg. |
| Standard Oil Co., No. 8 Inglewood Deep, Los Angeles | 17- 2-14 | 2,750 | cmtd. 2,535 |
| Allied Pet., No. 1 Del Rey, Los Angeles Co. | 28- 2-15 | 6,709 | suspended |
| Blackline Oil Co., No. 1 Del Rey, Los Angeles Co. | 27- 2-15 | 6,634 | fish D. P. |
| Crest Oil Co., No. 1 Del Rey, Los Angeles Co. | 27- 2-15 | 3,952 | sd. sh. drlg. |
| Lucas, Andrew, No. 1 Del Rey, Los Angeles Co. | 35- 2-15 | 4,171 | sd. sh. drlg. |
| Red Seal Oil Co., No. 1 Del Rey, Los Angeles Co. | 27- 2-15 | 6,324 | cmtd. 6,200 |
| Mathews Pet. Co., No. 1 Del Rey, Los Angeles Co. | 27- 2-15 | 6,522 | suspended |
| Birch Royer Oil Co., No. 1 Del Rey, Los Angeles Co. | 34- 2-15 | 6,532 | redrlg. 6,040 |
| Joyce Oil Co., No. 1 Del Rey, Los Angeles Co. | 27- 2-15 | 6,742 | P. B. 6,695 |
| Royalty Serv. Corp., No. 3 Del Rey, Los Angeles Co. | 27- 2-15 | 6,575 | swabbing |
| Union Oil Co., No. 13 Del Rey, Los Angeles Co. | 27- 2-15 | 6,306 | completing |
| Union Oil Co., No. 14 Del Rey, Los Angeles Co. | 27- 2-15 | 3,855 | P. B. 3,652 |
| Union Oil Co., No. 15 Del Rey, Los Angeles Co. | 27- 2-15 | 750 | cmtd. |
| Del Rey Oil Co., No. 1 Del Rey, Los Angeles Co. | 27- 2-15 | 6,231 | sd. sh. drlg. |
| Treasure Oil Co., No. 1 Del Rey, Los Angeles Co. | 27- 2-15 | 498 | twist off D.P. |
| West American Oil Co., No. 2 Bandini, Los Angeles | 17- 2-12 | 952 | sd. sh. drlg. |
| Western Gulf, No. 1 Bandini, Los Angeles Co. | 16- 2-12 | 6,853 | sd. sh. drlg. |
| Vanco Dev. Co., No. 1 Artesia, Los Angeles Co. | 25- 3-12 | 5,817 | sd. sh. drlg. |
| Monarch Oil Corp., No. 1 Topanga, Los Angeles Co. | 5- 1-16 | 207 | hd. sd. drlg. |
| Caminol Co., No. 1 Montebello, Los Angeles Co. | 9- 2-11 | .... | location |
| Texas Co., No. 1 Montebello, Los Angeles Co. | 5- 2-11 | 5,497 | hd. sd. drlg. |
| Texas Co., No. 2 Montebello, Los Angeles Co. | 5- 2-11 | .... | rigging up |
| Universal Consd., No. 3 Montebello, Los Angeles Co. | 5- 2-11 | 2,571 | sd. sh. drlg. |

| | | | | |
|---|---|---|---|---|
| Universal Consd., No. 4 Montebello, Los Angeles Co. | 5- | 2-11 | .... | rigging up |
| Woodward Oil Co., No. 1 Montebello, Los Angeles Co. | 4- | 2-11 | 3,220 | P.B. 3,167 |
| Wilshire Oil Co., No. 1 Montebello, Los Angeles Co. | 5- | 2-11 | 4,196 | hd. sd. drlg. |
| Frontier Oil Co., No. 1 Pico, Los Angeles Co. ..... | 7- | 2-11 | 4,299 | sd. sh. drlg. |
| Pressell & Tull, No. 1 Puente, Los Angeles Co. ..... | 16- | 2- 9 | 4,431 | reaming |
| International Dev. Co., No. 2 Saugus, Los Angeles Co. | 34- | 5-16 | .... | foundation |
| Great Coastal Oil Co., No. 1 Elsinore, Riverside Co. | 36- | 5- 5 | 1,510 | sd. sh. drlg. |
| Domain Dev. Co., No. 1 Trabuco, Orange Co. ..... | 2- | 6- 7 | 870 | sd. sh. drlg. |
| Huntington Cent. Oil Co., No. 1 Newport, Orange Co. | 29- | 6-10 | .... | rig, suspended |
| Wilshire Oil Co., No. 1 Newport, Orange Co. ..... | 28- | 6-10 | 1,920 | br. sh. drlg. |
| Viking Oil Co., No. 1 Richfield, Orange Co. ..... | 25- | 3- 9 | 3,000 | redrlg. 1,280 |
| Hillman & Long, No. 1 San Juan, San Bernardino Co. | 2- | 3- 8 | .... | rigging up |

# S. W. TEXAS WILDCATS

Week Ending August 3

### Bandera County

**Milam Drlg. Co.'s (Plateau Oil Co.) No. 1 Garrison, G.C.&S.F. Sur. No. 506, 1,500 ft. from W and 2,970 ft. from N lines of survey.**
No report.

Palm Winn Oil Co.'s No. 1 Watson, 600 ft. N of center line, Sur. 71 (workover). No report.

### Bastrop County

**Monts & Beavens' No. 1 Leatherwood, 330 ft. from NW line and 550 ft. from NE line, Wm. McLanglin Sur.**
Tested salt water in Edwards, 3,275-77 ft.

### Bee County

G. M. Church's No. 1 J. C. Woods, 330 ft. from N line, 330 ft. W of road, J. Ryan Sur., H.&G.N.R.R., Abstract 196
Coring sand, showing gas 4,845 ft.

Grisham et al's No. 1 Ansberger, 330 ft. of S and W lines of 185-ac. tract, Sec. 1.
Rig up.

Henderson Coquat et al's No. 1 Baily; ½ mile W Mineral.
Drlg. 3,600 ft.

**F. P. Hynes' No. 2 Plummer, F. J. Chessman Sur. 1, 40 ft. W of No. 1.**
**Drlg. 2,500 ft.**

Rube Heflin's (McMurray) et al No. 1 Holxmark, 330 ft. from N and E lines of lease.
T.D. 4,131 ft.; abnd.

D. V. Smith et al's No. 1 Atkins, M. M. Wood Sur.
**Rig.**

### Bexar County

Cherokee Drlg. Co.'s No. 1 Chapman, 2,100 ft. from S line, 3,200 ft. from E line, A. J. Leslie Sur.
S.D. 400 ft.

Fay Chew's No. 5 Jones, Sec. 9, Pena Sur., 1½ miles E of Adkins.
Drlg. 356 ft.

Jas. B. Cunningham's No. 1 L. F. Ridder, 950 ft. S of Nelson Road, 1,300 ft. from E line, Block 5,196, Sur. No. 58.
Drlg. sand 520 ft.

Derine Oil Co.'s No. 2 Indyk, 600 ft. E line, 400 ft. S line, Blk. 4.
Location.

**C. J. LeComte's No. 1 Herbst, 150 ft. out of SW cor. of Manuel Leal Sur.**
**Rigging up to deepen, 260 ft.**

McPhee & Briggs' No. 1 F. Lamb, 9,200 ft. from S line, 800 ft. from W line of Sur. No. 3 (Manuel de Luna).
T.D. in chalk 2,327 ft.; drlg. side tracked hole, 2,150 ft.

Mid-Texas Prod. Co.'s No. 1 C. G. Walker, 330 ft. out of NE cor. Lot 21, S. M. Doble Sur. No. 79; drlg. Glen Rose lime
Drlg. T.D. 1,280 ft.; show gas 1,240-52 ft.

Morgan & Magna's No. 1 Kirkwood, Desaque Sur., 9 miles SW of San Antonio.
Location.

Carroll C. Raborn's No. 1 Claude McCauley, 150 ft. from N and NW lines of tract in Sec. 52, Wm. Harrison Sur.
S.D. 950 ft.

C. C. Raborn's No. 1 Palfrey, 2,000 ft. W of Salado Creek, 2,500 ft. from S line, Alamiz League.
Location.

C. C. Raborn's No. 1 A. B. Stephens, 1,630 ft. from N line, 1,540 ft. from W line of tract, P. B. Hayes Sur. No. 3.
**S.D. 415 ft.**

### Blanco County

**H. R. Roe and W. E. Nixon's No. 1 Polk Morrisey, 2,000 ft. from W line, 1,000 ft. out of SE cor., 1,600 ft. from N line of Thomas H. Webb Sur. No. 91.**
**Drlg. 370 ft.**

### Dewitt County

**Reginald F. Baurke's No. 1 W. C. Steinman Est., 937 ft. from N and S lines, Uriah Blue 1-3 League.**
**T.D. 115 ft.; S.D.**

J. C. Crossman's No. 1 Kleberg, 2 miles NW Cuero (old test).
T.D. 80 ft.; S.D.

D. G. Glaspier's No. 1 Schuebel, 330 ft. from S and W lines of tract, Fitzgerald grant.
Location.

### Duval County

Atkins & O'Neill's No. 1 Clara Driscoll Sevier, 2,640 ft. from N, E and W lines of Sec. 7, T.&N.O. R.R. Co. Sur.
Spudded.

J. H. Chandler's No. 1 Rita Pena, 1,325 ft. of NW line, 2,825 ft. of SW line, Share 4, Mesquite grant.
Spudded.

**M. E. Davis' (Benedum & Trees) No. 1 G. B. Parr, 4,600 ft. from N line, 2,960 ft. from W line of tract, San Andres grant.**
**Making electrical coring test 5,152 ft.**

**Magnolia Pet. Co.'s No. 1 D.C.R.C., 330 ft. from S & E lines of Sur. 100.**
Sand 1,867 ft.; cmtd. csg. 1,862 ft.

**Marzo Oil Co.'s No. 1 E. R. Hagist, 150 ft. from E line, 330 ft. from N line, Sec. 269, Blk. 3, Beaty, Seale & Forward Sur.**
**Drlg. 176 ft.**

Stanolind Oil & Gas Co.'s No. 1 Farmers Life Ins. Co., 3,987 ft. of E line, 330 ft. of N line, E. R. Gray Sur., Sec. 416.
**Drlg. 700 ft.**

**T. J. & M. Drlg. Co.'s No. 1 Davidson, 2,-770 ft. S line, 330 ft. W line of Sur. 90.**
**T.D. 3,020 ft.; abnd.**

### Fayette County

Ross Fenton's No. 1 Kasper (262-ac.), 3,-000 ft. from NE line, 1,280 ft. from SW line, of Thos. Green Sur. No. 28.
S.D.

### Frio County

Midland Oil Co.'s No. 1 San Antonio Joint Stock Land Bank, 300 ft. from NE and SE lines of 60-ac. tract, B.S.&F. Sur.
No report.

### Goliad County

Brown & Wheeler, Inc.'s No. 1 Mrs. Jennie Ray Kauffman, 1,650 ft. from NW line, 330 ft. from NE line of 4,265.06-ac. tract.
Comp.; T.D. 4,538 ft.; 10 bbls. per hour, through ¼-in. choke; C.P. 1,600 lbs.; T.P. 1,550 lbs.

Hendricks et al's No. 1 Gillette, 330 ft. of NW and SW lines of tract, G. Gomez Sur.
Location.

Keystone Royalty Co.'s No. 1 M. Woods, SW part of county, 15,000 ft. from SW line, 5,000 ft. from NW line of J. Sherman Sur.
T.D. 5,960 ft.; fishing for core barrel.

### Gonzales County

Amerada Pet. Co.'s No. 1 Union Central Life, 800 ft. of SW line, 330 ft. of SE line, 122-ac. tract, Hendricks Sur.
Sur. csg. set 101 ft.; W.O.C.

S. W. Forrester Oil Co., Inc.'s No. 1 Stein, 475 ft. of SW line, 1,033 ft. of SE line, 311-ac. tract, Bane Sur.
Rig up.
Chary, 320 ft. N and E lines of Tract

Resource Prod. Co.'s No. 1 Lanbeck, 708 ft. from NW line, 1,919 ft. from SW line, J. M. Salinas Sur.
Spudded in; S.D.

### Guadalupe County

**J. E. Clark's (H. H. Weinert) No. 1 Lay, 800 ft. along road from SW cor., then 150 ft., J. K. Davis Sur.**
T.D. 2,446 ft.; Sand 2,372-81 ft.; made 2 bbls. per hour, cleaning.

Bob Gode et al's No. 1 Hicks, 1,320 ft. from E line, 150 ft. from S line of 189-ac. tract in Santo Y. Coy Sur.
Drlg. lime 800 ft.

**Mineral Oil Corp. of Texas' No. 1 Allen Phillips, 162 ft. from N line, 900 ft. from E line of tract, Cortinos Sur.**
**T.D. 888 ft., resumed drlg.**

**W. T. Scrutchin's No. 1 A. H. Smith, 150 ft. from E line, 1,350 ft. from N line of 34.5-ac. tract, Jas. B. Cowan Sur.**
**Drlg. 825 ft.**

J. S. Suttle's No. 2 Baenziger, S of Seguin. Old well; R.U. to W.O.

Suttle et al's No. 1 Baenziger, 700 ft. from S line, 500 ft. from E line of 125-ac. tract, Monsola Sur.
**Casing collapsed; standing 2,156 ft.**

### Hidalgo County

Bluff Pet. Co.'s No. 1 Porcion Land Co., 330 ft. from N and E lines of NE 100 acres of S 500 acres of Share 14, Por. 49.
T.D. 5,539 ft.; cleaning out to deepen.

Deering & Kayser's No. 1 Engelman, Lot 3, Blk. 70, Las Mestenas tract.
T.D. 7,508 ft.; P.B. sand 6,740-50 ft.; comp.; 25,000,000 ft. gas spraying distillate.

Downey & Morton's No. 1 Daskom, 450 ft. from E line, 55 ft. from S line of Blk. 34, Por. 45.
Re-working 4,115 ft.

E. H. East's No. 1 Scarbrough, 150 ft. from S line, 1,150 ft. from E line of Blk. 14, East Retema Subd., Tule Grant.
T.D. 1,227 ft.; S.D.

**Maddox & Walter's No. 1 John H. Shary, 208 ft. from SE line, 440 ft. from SW line of Blk. 21, Porcion 58.**
No report.

**Madox Turnbull & Irwin's No. 1 J. H. Shary, 320 ft. N and E lines of Tract 21, Porcion 59.**
Drlg. 5,425 ft.

**Mundy & Son's No. 1 Guerra, 853 ft. from W line, 1,275 ft. from N line of Tract 12, Porcion 41.**
Spudded.

### Jim Hogg County

**Miller & Pippin's No. 1 Yeager, 527 ft. S line, 150 ft. E line of Blk. 6, Sur. 20.**
**Fishing 3,630 ft.**

**A. W. Phillips' No. 1 Allen, 660 ft. from S and E lines of Blk. 293, Pippin Subd. of the Randado grant.**
**Set csg.**

G. C. Rankin et al, NW cor. Lot 6, Sec. 5, M.I.M.

### Jim Wells County

Sunray Oil Co.'s (A. M. Hagan) No. 1 Robert Adams, 330 ft. N and E of SW cor. Sec. 10, M. Ruiz Sur.
Drlg. sand and shale 3,015 ft.

### Karnes County

Marts Pet. Co.'s (Harris & Jecker) No. 1 Cochran, 150 ft. from S line, 360 ft. from E line, McConnel League.
Resumed drlg.

Marzo Oil Co.'s No. 1 Thane, 330 ft. from S & E lines of W half of N 160-ac. of 280-ac. tract in F. Ruiz Sur.
Set sur. csg. 55 ft.; drlg. 60 ft.

Harry Sample's No. 1 Seeger, 330 ft. from W line, 330 ft. SW of road, J. Pointevent Sur.
S.D. 3,008 ft.

R. G. Tonkin's No. 2 Henke, 3,670 ft. from SW cor., 330 ft. from W line (location changed).
Location.

### Kendall County

J. C. Freeman's No. 1 J. M. Gerffers, 1,300 ft. out of SW cor. of 11½-ac. tract, Mara Hodgson Sur., Sec. 796.
**Standing 103 ft.**

### Kerr County

Emerald Oil Co.'s (Meteor Oil Co.) (Edminton & Walker) No. 1 Whitworth, 1,160 ft. from S line and 1,333 ft. from E line of Sec. 1,439 of the H.E.W.T. Sur.
S.D. in lime 800 ft.

G. F. Schreiner et al's No. 3 Jeff Love, 1,-500 ft. SE of No. 1 and 1,530 ft. from SE cor. and 300 ft. from N line of Sec. 1,591.
T.D. 5,625 ft.; porous lime; S.W. 5,622-25 ft.; S.D.

### Kleberg County

Harry Clark's No. 1 Rodgers, Lot 5, Blk. 35.
S.D. 750 ft.

Fidelity & Culbertson Exploration Co.'s No. 1 Kinlin, Blk. 39, Lot 4, K.T.&I. Sur.
Location.

**Parr & Ponder's No. 1 Sam Michaik et al, 330 ft. from N line and 775 ft. from S line, Blk. 37, Sec. 5; 5 miles SE Kingsville.**
Coring 2,000 ft.

### LaSalle County

Joe Danciger (Killingsworth Oil Co.'s) No. 1 Yeager, Sur. 94, 100 ft. from W line, 300 ft. from N line of Sec. 94, Blk. 5, Lot 10.
T.D. 2,012 ft.; cemented 7⅝-in. csg. at 1,766 ft.; perforated 1,700-20 ft.; tested fresh water; recemented and perforated at 1,500-20 ft.; tested sulphur water; S.D.

### Lee County

**McNeill Pet. Co.'s No. 1 Beatty, 3,700 ft. from SW line, 4,200 ft. from SE Line, Wm. Nichols Sur.**
T.D. 3,367 ft.; Edwards lime, 5 3/16-in. csg. at 3,306 ft.

Scharbach & Stoe's No. 1 Robert Otto.
T.D. 2,450 ft.; S.D.

### Live Oak County

**Mills Bennett Prod. Co.'s No. 1 Watson et al, 3,653 ft. NE cor. of L. D. Camp tract, then 990 ft. N line of tract, Pablo Salinas Sur.**
Sand 4,699-4,711 ft.; tested 480 ft. oil, 150 lbs. pressure, coring deeper.

E. H. Buchner's No. 1 McNeill, 300 ft. of SW cor. of 40-ac. tract, Blk. 8, McNeill Subd.
Location.

Earl Calloway's No. 1 Lyne, 895 ft. of W line, 330 ft. of N line, SW¼, SW¼ of M. M. Lyne Sur.
Location.

**Earl Calloway's No. 1 George West hrs., Sec. 255, B.S.&F. Sur.**
Drlg. 2,000 ft.

Conway & Buescher's No. 1 Sanger, 330 ft. N of center of NW line of Sur. 224 in Sur. 383.
Location.

Henderson Coquat's No. 1 Reagan, McGloin Sur., E of Nueces River and S of Oakville.
Drlg. shale 1,752 ft.

### McMullen County

Bussa Oil Co.'s No. 1 F. B. Horton, center of E½ of NW¼ of S 640-ac. of J. M. Jean Sur. No. 29.
No report.

John O. Gibson's No. 1 Mazur & McDowell, 330 ft. from N and W lines, Sec. 19, Blk. 4, H.T.&B. Sur.
Drlg. shale 1,812 ft.

J. O. Gibson's No. 1 G. C. West (Lowe), 150 ft. E line, 1,200 ft. S of NW cor. of Lot 1, Blk. 4, H.T.&B. Sur.
S.D. 465 ft.

Howard & Carpenter's No. 1 Jungman, 1,-020 ft. from E line, 950 ft. from S line, Hely Sur.
No report.

Chas. A. Hall's No. 1 B. C. Claunch, 368 ft. from N line, 160 ft. from E line of 25-ac. tract, Michael Haley Sur.
Location.

Points et al's No. 1 Fahler, 432 ft. S line, 819 ft. E line of tract, Byrna pasture.
T.D. 1,004 ft.; S.D.

Texas Oil Co.'s No. 1-B Arkinson, center of NW¼, NE¼, Sec. 96, R. C. Lomak Sur.
Location.

### Medina County

Joe Dupree's No. 1 Batto, 258 ft. from E line, 957 ft. from N line, J. Ball Sur. No. 1,478.
Drlg. 460 ft.

Letro Oil Corp.'s No. 1 E. B. Forrest, 1,928 ft. from N line, 1,908 ft. from E line of 640-ac. tract, Blk. 69.
Cmtd. sur. csg. 70 ft.; drlg. plug.

W. T. Shoemaker's No. 1 Noonan, 82.5 ft. S 2 deg. 20 ft. E of old well, Sec. 249, M. Simon Sur.
S.D. 700 ft.

### Nueces County

N. M. Wilson's No. 1 J. C. Bluntzer, SE cor. of tract, Casa Blanco Grant.
Rig.

### Real County

H. J. Heartwell et al's No. 2 Mrs. M. S. Perry, 250 varas from NW line, 775 varas from SW line of A.B.&M. Sur. No. 175.
Sidetracking hole; T.D. 3,150 ft.

### San Patricio County

Masterson et al's (Tom Graham) No. 1 Wursbach, 330 ft. from W line, 4,350 ft. from S line of C. C. Hornsby Sur.
Standing 5,521 ft.

Willis Storms' No. 1 Hobbs, 877 ft. S and 47 deg. 30 min. E from W corner of 50-ac. tract, N 43 deg., E 622 ft. to center of tract, Delgado Sur.
Spudded.

### Starr County

C. R. Borah's No. 1 A. Guerra, San Jose grant, 330 ft. from N and 150 ft. from E lines of Sec. 6 (NE part of county).
Fishing 3,517 ft.

Nix et al's No. 1 S.C.C.C., 150 ft. from S and W lines of Blk. 58, Jeffries Lambeth Subd.
Coring 2,465 ft.

Pedernal Oil Co.'s No. 1 Hicks et al, 187 ft. from NW line, 318 ft. from NE line of Blk. 6, Pedernal Grant.
No report.

### Travis County

R. C. Hill's No. 1 S. A. Johnson, 1,473 ft. from SE line, 308 ft. from NE line of 80-ac. tract, John W. Haun Sur.
Drlg. 849 ft.

W. F. Billingslea's No. 1 Lundgren Est., 330 ft. from NW line, 150 ft. NE of road, Blk. 17, Lemuel Kimbro League.
No report.

G. A. Artz & Co.'s No. 1 Rolff, 454 ft. N line, 207 ft. W of tract, Hancock Sur.
No report.

**Swearingen & White's No. 1 Edwin Carlson, Hann Sur.**
No report.

### Webb County

Arthur H. Wray's No. 1 Geo. Stuempke, Share 1, Brewster pasture, Galan grant.
S.D. 1,125 ft.; moving in electric rig; To deepen.

E. T. Burton's No. 1 Billings, NE cor. of SW¼, Sur. 113.
Location.

J. E. Neal's No. 1 Laurel Bros., 1,320 ft. of S and E lines, Sur. 1,119.
Location.

### Willacy County

W. T. Daniel's No. 2 Armendiaz, near Rio Hondo, 7,798 ft. from E and W lines of Share 14.
Standing 3,850 ft.

Kingwood Oil Co.'s No. 1 Santa Rosa, Inc., 160 ft. from E line, 637 ft. from S line of Sec. 36, Blk. 16, Share 44, San Juan de Carricitas grant.
Drlg. shale 5,006 ft.

### Williamson County

**Fuchs & Walter's No. 1 G. Allman, John Bevil Sur. No. 56, 150 ft. from SW line, 300 ft. most westerly SW line of 264-ac. tract.**
**Lost hole 875 ft.; will drill new hole.**

H. B. and Otto Glass' No. 1 Albert, 3 miles SE of Taylor
T.D. 40 ft.; S.D.

**H. L. Goff et al's No. 1 Albert Klotz, 1,700 ft. from N line, 150 ft. from E line of 100-ac. tract, W. Cartwright Sur.**
**S.D. 1,250 ft.**

**Hays et al's No. 1 Pfluger, 150 ft. from E line, 150 ft. from S line, White Sur.**
**S.D. 915 ft.**

**Kothmann et al's No. 1 Albert Krueger, John Bevil Sur. No. 56, 1,400 ft. from NW line, 1,050 ft. from SW line, 115-ac. tract**
No report.

Rue et al's No. 1 Chas. Bachmayer, 6 miles SE Taylor.
**T.D. 800 ft.; csg. parted; fishing.**

### Zapata County

F. H. Crow et al's No. 1 Daniel Yzaguirre, 330 ft. out of SW cor. Share 1, Porcion 14-15-16, D. Yzaguirre tract.
Lost drill stem 3,017 ft.; abnd.

Kimerow Co.'s No. 1, 330 ft. of N and W lines, Blk. 26, La Huerta Grant.
Spudded in.

Joe Palmer's No. 1 Emma A. Markrud, 150 ft. from NE and NW lines, Blk. 22, Sur. No. 616.
No report.

Texas Royalty Investment Co.'s No. 1 N. J. Vela, 686 ft. from NE line, 300 ft. from NW line, Blk. 7, Por. 29.
**S.D. 2,360 ft.**

# S. W. TEXAS PROVEN

Week Ending August 3

### Carroll—Bastrop County

**Nelson Puett's No. 5 Carroll Estate, 1,926 vrs. (5,350 ft.) from NW line and 619.20 vrs. (1,720 ft.) from SW line of Andrew Mayes Sur. No. 19.**
T.D. 2,385 ft.; abnd.

**Fay Wilson et al's No. 1 Calahan, 7,700 ft. from NW line, 350 ft. from SW line, Mays Survey.**
Rig up.

### Bateman—Bastrop County

**Batts & Jarnson's No. 1 Mrs. Annete Harris, 576 vrs. (1,600 ft.) NW line, 630 vrs. (1,750 ft.) SW line, John Maxmillian Sur. 22.**
2,150 ft.; S.D.

### Caesar—Bee County

Luling Oil & Gas Co.'s No. 9-B Ruhman, 1,180 ft. from NW line, 150 ft. from SW line of Blk. 40, Hodge Sur.
T.D. 3,059 ft.; comp.; 140 bbls.; T.P. 210 lbs.; C.P. 475 lbs.

El Toro Oil Co.'s No. 1 J. J. Grissom, 150 ft. from N and W lines of 10-ac. tract, P. B. Early Sur.
Spudded; no report.

**Rual Swiger's No. 6 Gardner, 150 ft. S and E lines of tract.**
T.D. 3,045 ft.; abnd.

Swiger et al's No. 4 Gardner, W offset to Vaughn producer.
Moving in material.

### Dirks—Bee County

Dirks Bros.' No. 6 Harris, 150 ft. from NW line, 330 ft. from NE line of Lot 2, Harris Subd.
Sand 3,875-85 ft.; T.D. 3,885 ft.; comp.; 30 bbls. per hour.

Mills Bennett Prod. Co.'s No. 1-C Harris, 330 ft. from SE and SW lines, J. L. Dugat Sur. No. A-1210.
S.D. 3,872 ft.; T.D. 3,885 ft.; comp.; 25 bbls. per hour.

Heyser, Heard & Walton's No. 7 Young, 660 ft. W of No. 2 Rawlins Sur.
Location.

Heyser, Heard & Walton's No. 6 Young, 330 ft. from S line, 660 ft. due W of No. 5, C. A. Dugat Sur.
Sand 3,842-87 ft.; cemented csg.; W.O.C.

**Heyser, Heard & Walton's No. 4 Young, 330 ft. from NE line, 700 ft. NW of No. 3, F. P. Rawlins Sur.**
Sand 3,865-3,909 ft.; Completing.

### Ray—Bee County

Dirks Bros.' No. 3 Ray, 660 ft. E of No. 2 and W road to Pettus in SW¼ of Sec. 7, 1,800 ft.; no report.

L. W. Littlejohn's No. 1 J. B. Borroum, 150 ft. out of SW cor. of 234-ac. tract, Wm. Gell Sur.
Standing 135 ft.

Magnolia Pet. Co.'s No. 2 Ray, 330 ft. from NE line, 150 ft. from E line of lease.
Comp.; 15 bbls. per hour; T.D. 3,938 ft.

Simms Oil Co.'s No. 1-B Campbell, SE cor. Lot 13 Campbell Subd.
Rig up.

Simms Oil Co.'s No. 2 Ray, 660 ft. W No. 1 Ray.
Location.

Simms Oil Co.'s No. 3 Ray, 660 ft. S No. 1 Ray.
Rig up.

Tide Water Oil Co.'s No. 1 Ray, 330 ft. N and E lines of 80-ac. tract, Blanchard Sur.
Sand 3,920-40 ft.; T.D. 3,945 ft.; comp.; no gauge.

Worth Oil Co.'s No. 3 Rutledge, 150 ft. out of SW cor., 300 ft. S of No. 2, 15-ac. tract, A. Hadley Sur.
Spudded in.

### Tuleta—Bee County

Highland Oil Co.'s No. 3 Campbell, 330 ft. from SW line, 400 ft. SE of No. 1 W. B. Blanchard Sur.
Sand 3,944-51 ft.; comp.; 10 bbls. per hour.

Southwest Exploration Co.'s No. 1 Heyden & Bruckhan, C of farm tract, 330 ft. from N and W lines of Sec. 20, Uranga grant.
Rigging up.

Sun Oil Co.'s No. 1 Page, 330 ft. from SE and SW lines of 160-ac. tract, Nancy J. Young Sur. A-558.
Drlg. T.D. 3,100 ft.

Texas Co.'s No. 3 Young, 330 ft. from S & E lines tract, Young Sur.
Cemented csg. 3,905 ft.; W.O.C.

Texas Co.'s No. 4 Young, 660 ft. E of No. 1, 330 ft. N of S line, George Young Sur.
Sand 3,950 ft.; cementing csg.

### Pettus—Bee County

United Prod. Co.'s No. 51 Geo. A. Ray, 540 ft. from E line, 4,500 ft. to northern lease line, Geo. A. Kerr Sur.
T.D. 3,757 ft.; abnd.

### Dobrowolski—Bexar County

D. C. Pegg and B. Miller's No. 3 Katie Strunk, 450 ft. from NE line and 1,450 ft. from SE line, Katie Strunk 139.65-ac. tract, Juan Montes Sur.
Drlg. shale 585 ft.

### Von Ormy—Bexar County

Joe H. Parker's No. 1 James McClosky, 1,500 ft. N line, 475 ft. W line, F. A. Desafire Sur. No. 134.
Standing 800 ft.

Richard Oil Co.'s No. 1 Karl Wellbacher.
Drlg. shale 635 ft.

### Palo Blanco—Brooks County

United Prod. Co.'s No. 1 Kathleen Jones Hocker, 1,300 ft. SW of No. 2, 1,636 ft. from N line of Los Megneijes de Palo Blanco Grant.
Coring 3,000 ft.

### Bruner—Caldwell County

Dawn Oil Corp.'s No. 2 Floyd Tiller.
Derrick.

### Branyon—Caldwell County

R. S. Boling's No. 2 C. F. Robertson, 575 ft. along Plum Creek from SW cor. of tract, 150 ft. from creek, John Neill Sur.
Testing 2,200 ft.

### Dunlap—Caldwell County

Exploration Co.'s (F. Meyers) No. 1 W. T. Mooney, 810 ft. from S line, 450 ft. from W line of 95-ac. tract, S. Seale Sur.
2,190 ft.; S.D.

Ballard & Witting et al's No. 1 Mrs. A. C. Bridges et al, 650 ft. from NW line, 450 ft. from NE line of Soloman Seale Sur.
Drlg. 1,998 ft.

W. T. Walker's No. 3 Walker, 330 ft. SE of No. 2.
1,200 ft.; S.D.

### Driscoll—Duval County

Continental Oil Co.'s No. 1-B Sevier Sur. No. 64, 660 ft. from S and E lines.
S.D. 2,872-85 ft.; T.D. 2,885 ft.; test show salt water.

### Government Wells Pool—Duval County

**Buffalo Oil Co.'s No. 1 C. W. Hahl, 330 ft. out of SE cor. of SE¼ of NE¼ of Sec. 61, J. Poitevent Sur.**
T.D. 2,338 ft.; abnd.

Magnolia Pet. Co.'s No. 49 D.C.R.C., 1,650 ft. N line, 990 ft. E line, Sur. 208.
Comp., T.D. 2,329 ft.; 100 bbls.

Magnolia Pet. Co.'s No. 3 D.C.R.C., Sur. 57.
Comp. 480 bbls. at 2,190 ft.

**Magnolia Pet. Co.'s No. 2 Herbst, 330 ft. from N and W lines, Sur. 70.**
Sand 2,808 ft.; cemented csg.

Parr Oil Corp.'s No. 3 R. L. Glover, 330 ft. from N and E lines of SE¼ of SE¼ of Sec. 44, J. Poitevent Sur.
Location.

Rodney DeLange No. 2 Hahl, Blk 5, Sur. 78.
Comp., 27 bbls. per hour through 9/16 inch choke.; T.D. 2,685 ft.

Smith & Storey's No. 15 Lundell, 330 ft. from W line, hence N at right angle 330 ft., Sur. No. 48.
Comp.; 30 bbls. per hour at 2,294 ft.

### Loma Novia—Duval County

Birdwell Oil Co.'s No. 1 B.C.C., 330 ft. from N and E lines of the SW, SW, Sec. 76.
Rigging up.

Buchanan & Blanco Oil Co.'s No. 1-B Ruiz, 185 ft. N line, 1,650 ft. E line, Sur. 73.
Location.

Duval Oil Co.'s No. 1 Hubbard, Morris & Cummings Sur., Sec. 77, 330 ft. out of NE cor. NE¼ section.
Rigging up.

Eastern Texas Pet. Co.'s No. 1 Hubbard, 330 ft. N and E line, NW¼ Sur. 71.
Location.

Frank Gravis' No. 1 Flodin, 330 ft. from S and E lines of Sur. 61.
T.D. 2,100 ft.; no report.

**Frank Grovis' No. 2 Byland, 330 ft. S and E lines, Blk. 2, Sur. 78.**
Location.

Claude Hamil's No. 2 Ruiz, 330 ft. from S and E lines of NW 160-ac. tract, Sur. 41.
Cemented csg.; W.O.C.

Claude Hamil's No. 6 Hubbard, 330 ft. from W line, 3,630 ft. from S line of Sur. 77.
Sand 2,604-24 ft.; comp.; 15 bbls. through ½-in. choke at 2,624 ft.

**Henderson & Harvey's No. 1 Ruiz, 900 ft. from E line and 1,980 ft. from N line of Sur. 125.**
Completing, 2,662 ft.

Highland Oil Co.'s No. 2 Hubbard, 330 ft. S and W lines, S½, N½ Sur. 384.
Location.

**Highland Oil Co.'s No. 1 Hubbard, NW cor. of Sur. 72.**
Comp.; 100 bbls. at 2,690 ft.

Lipscomb, Doubert et al's No. 1 Hubbard, 330 ft. from N and E lines of S½ of NE¼ of Sur. 75.
Sand 2,644-56 ft.; T.D. 2,656 ft.; comp.; 30 bbls. per hour, swabbing.

Rosen Oil Co.'s No. 3 Hubbard, 330 ft. from W line, 990 ft. from N line of SW¼ of Sur. 84.
Sand 2,765-75 ft.; comp.; no gauge.

Shell Pet. Corp.'s No. 2 Hubbard, 660 ft. due N of No. 1, 330 ft. from E line of 320-ac. tract, Sec. 77.
T.D. 2,797 ft.; comp.; 15 bbls. per day at 2,797 ft.

**Stieren Oil Co.'s No. 3 Wright, Sur. 72.**
T.D. 2,714 ft.; I.P. 86 bbls. per day.

Texas Co.'s No. 2 Wendt, 330 ft. W line, N line, Sur. 68.
Testing.

### Seven Sisters—Duval County

Atlantic Oil Co.'s No. 1 J. F. Welder, 330 ft. N and W lines, Sur. 385.
Location.

Humble Oil & Refg. Co.'s No. 2-A Serna Jr. et al, 660 ft. W of No. 1-A, 330 ft. N of S line, 1,650 ft. E of W line of Sec. 384, B.S.&F. Sur.
Drlg. 2,325 ft.

Mid-Continent Pet. Corp.'s No. 1 Serna Jr., 330 ft. N and W lines of S½ of N½ Sur. 384.
Location.

Santa Clara Oil Co.'s No. 9 Wood-Welder, 990 ft. N line, 330 ft. E line of 160-ac. Tract, Sec. 385, J. Poitevent Sur.
Rig up.

Santa Clara Oil Co.'s No. 5 Wood-Welder, 660 ft. from N line, 330 ft. from E line of 160-ac. tract, Sec. 385, J. Poitevent Sur.
Comp.; T.D. 2,496 ft.; no gauge.

### Pearsall—Frio County

Amerada Pet. Corp.'s No. 1 Kothman, 500 ft. from N and W lines of B. L. Crouch Sur.
T.D. 3,963 ft.; cemented bottom of hole; tested salt water 3,959 ft.; drlg. shale 4,321 ft.; tested S.W. 4,370 ft.; abd.

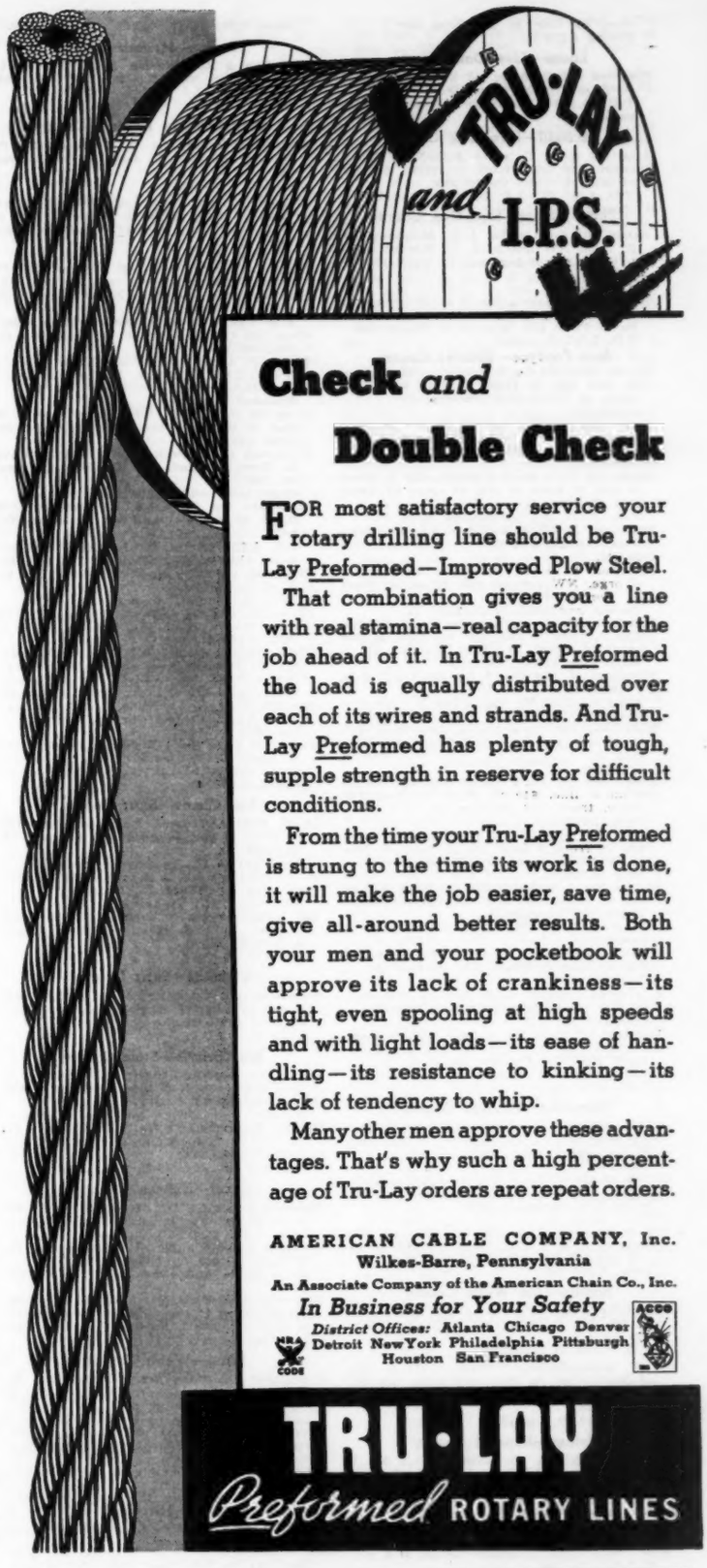
Amerada Pet. Corp.'s No. 1 D. F. Smith et al, 4,500 ft. from NE line, 1,650 ft. from SE line, Joseph V. Mason Sur. No. 322.
Top Georgetown 6,077 ft.; T.D. 6,171 ft.; bailing.

### Darst Creek—Guadalupe County

Texas Co.'s No. 2 Posey (workover).
Old T.D. 2,606 ft.; set 7-in. csg. at 2,575 ft.; T.D. of sidetracked hole 2,583 ft.

### Dinero—Live Oak County

J. O. Whittington's No. 2 Henrietta C. Little, 2,640 ft. from SW line, 1,950 ft.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from SE line. M. M. Shipp Sur.
Coring 4,370 ft.

**Lucas—Live Oak County**

Houston Oil Co.'s No. 32 Cartwright, 1,124 ft. N of No. 31, Trudo Sur.
P.B. 5,246 ft.; comp.; gas well not gauged.

**McNeill—Live Oak County**

Lion Oil Refg. Co.'s No. 8 McNeill, 330 ft. from NE line, 1,103 ft. from SE line of Blk. 9, Jane Curry Sur.
T.D. 4,381 ft.; I.P. 150 bbls. per day.

**Three Rivers—Live Oak County**

Benco Oil Corp.'s No. 1 E. Mahoney, 155 ft. from NW line of J. H. Harvey tract, 3,109 ft. SW of highway in Mark Killelly Sur.
S.D. 78 ft.

Turner & Walker's No. 1 C. F. Simmons, 50 ft. from N line, 300 ft. from W line, Farm Tract 513, Blk. 12, S. Hayes Sur.
T.D. 1,792 ft.; abnd.

**Sam Fordyce—Hidalgo County**

Cortez Oil Co.'s No. 2-C Smith, 230 ft. from N line, 690 ft. from W line of NE 40 acres of Tract B-3, Porcion 41.
Location.

Cortez Oil Co.'s No. 3-C Smith, 230 ft. from N line, 1,150 ft. from W line of NE 40 acres of Tract B-3, Porcion 41.
Location.

Cortez Oil Co.'s No. 1-C Smith, 230 ft. from N and W lines of NE 40 acres of Tract B-3, Porcion 41.
T.D. 2,945 ft.; perforated 2,745 ft.

Harrison, Davis & Bishop's No. 4 Guerra, Tract 14, Porcion 41.
M.I.M.

Harrison & D. D. Oil Co.'s No. 2 Lula George, NW cor. of SW 20-ac. of tract 13, Porcion 41.
Coring gas sand; T.D. 2,707 ft.

Harrison, Davis & Bishop's No. 3 Guerra, 230 ft. from S line, 690 ft. from E line of 40-ac. tract, Tract 12, Porcion 41.
Wild well killed; cleaning.

Henshaw et al's No. 1 Smith, Tract 3-B, Porcion 41.
Sand 2,740-42 ft.; csg. 2,740 ft.; running liner; T.D. 2,747 ft.

Kingwood Oil Co.'s No. 6 Lawrence, 150 ft. N line, 550 ft. E line, Tract 274, Porcion 39.
Location.

Kingwood Oil Co.'s No. 6 Guerra, 150 ft. from S line, 640 ft. from W line, SW 20-ac. tract, 256 Porcion 39.
Drlg. 1,200 ft.

Kingwood Oil Co.'s No. 4 J. Lawrence, 300 ft. from N line, 150 ft. from W line of W 40-ac. tract 274, Porcion 39.
Drlg. 2,550 ft.

Lacy's No. 1 Seabury, 230 ft. from S line, 530 ft. from W line of 6.25-ac. tract, Tract 256, Porcion 38.
Sand 2,761-64 ft.; T.D. 2,770 ft.; run liner.

H. J. Porter's No. 2 C. E. Smith, N end of 8½ of tract in Tract 278, Porcion 40.
Spudded; S.D.

E Powell's No. 1 Lula George, SW cor. of NW 20-ac. Tract 13, Porcion 41.
Spudded in; S.D.

Windsor Oil Co.'s No. 3 Doss, 620 ft. from N line, 150 ft. from W line of 55-ac. tract No. 278, Porcion 40.
S.D. 2,748-53 ft.; csg. 2,744 ft.; cleaning; T.D. 2,753 ft.

**Mercedes—Hidalgo County**

Union Sulphur Co.'s No. 5 American Rio Grande, L. & L. Co., 230 ft. N line, 350 ft. W line, Tract 2,082.
Spudded in.

Union Sulphur Co.'s No. 4 A.R.G.L.&I.C., 400 ft. N and W lines, Lot 1, Blk. 99, 1¼ miles SW discovery well.
Drlg. 5,150 ft.

Union Sulphur Co.'s No. 1 American Rio Grande L. & L. Co., 400 ft. S and W of NE cor. of Lot 229, Blk. 59 (W.O.).
Drlg. 6,960 ft.

**Sandia—Jim Wells County**

Magnolia Pet. Co.'s No. 6 Seeligson, 600 ft. W, 330 ft. S of No. 3 Canales Sur No. 20.
T.D. 7,125 ft.; fishing.

O. W. Killam's No. 7 Wade, 1,320 ft. SE of No. 4, 200 ft. from NW line, 225 ft. from NE line, Lot 1, Blk. C, Lopez de Jean grant.
T.D. 5,170 ft.; abnd.

**Weiner—Kendall County**

Southwestern Dev. Co. Synd., Ltd.'s No. 1 W. G. Werner, 1,645 ft. from N line, 765 ft. from NW line of 320-ac. tract, J. F. Torrey Sur. No. 781.
675 ft., underreaming.

**Kingsville—Kleberg County**

Ray Clark's No. 1 House, Lot 5, Blk. 37, K.T.&I. Co. Sur.
S.D. 1,000 ft.

Fidelity Exploration's No. 1 Paul O. Henry, 150 ft. from N line midway E and W lines of Blk. 2, Sec. 49, K.T.&I. Sur.
2,600 ft., no report.

Fidelity Exploration Synd.'s No. 1 Vivian Kivlin, Sec. 4, Blk. 39, K.T.&I. Sur. on Vivian Kivlin lease.
Derrick blown down.

**Jacob Pool—McMullen County**

Loma Oil Co.'s No. 5-W Jacob, 2,207 ft. from E line, 13 ft. from N line of Jacob Sur. No. 10.
T.D. 1,750 ft.; abnd.

M. E. Young's No. 8-A Cox, E of Frio River across line from Lark tract in M. Hely Sur. (old well).
Sand 1,679 ft.; no report.

**Loma Alta—McMullen County**

Loma Oil Co.'s No. 1 Hagist, NE cor. of NW¼ of Sur. 168.
Sand 2,190-92 ft.; 2,215 ft., no report.

**Taylor—Medina County**

Callahan & Robert's No. 1 Ray Taylor, 1,450 ft. NS line, 220 ft. EW line, Sur. No. 135.
Resume drlg.

**Plymouth-San Patricio County**

Benson & Jones' No. 1 Welder, 2,332 ft. from S line, 466 ft. from E line of Sec. 38.
Coring 5,635 ft.

Heep Oil Corp.'s No. 4-E Welder, 466 ft. from N line, 1,399 ft. from E line of N 400-ac. tract, Sec. 46, R. Montgomery Sur.
Rigging up.

Heep Oil Corp.'s No. 2-E Welder, 466 ft. from E line, 1,399 ft. from N line, 933 ft. due S of No. 1-E, N 400-ac. of Sec. 46, R. Montgomery Sur.
T.D. 5,667 ft.; recemented bottom hole.

Heep Oil Corp.'s No. 5-E Welder, Sec. 46.
Rigging up.

Heep Oil Corp.'s No. 7-E Welder, 466 ft. E line, 2,032 ft. S line, Montgomery Sur., Sec. 46.
Spudded in.

Heep Oil Corp.'s No. 1-F Welder, 466 ft. N and E lines of 200-ac. tract, Sec. 46.
Drlg. 500 ft.

Plymouth Oil Co.'s No. 10-C Welder, 1,500 ft. from W line, 266 ft. from N line, Sec. 48.
Drlg. sand and shale 2,216 ft.

Plymouth Oil Co.'s No. 8-C Welder, 933 ft. E of No. 5-C and 933 ft. N of No. 4-C.
T.D. 5,625 ft.; comp. 150 bbls. through ⅛-in. choke; T.P. 275 lbs.; C.P. 650 lbs.

Plymouth Oil Co.'s No. 7-C Welder, 933 ft. W of No. 5-C.
5,638 ft.; comp.; no gauge.

Plymouth Oil Co.'s No. 9-C Welder, 1,056 ft. N, 466 ft. E of No. 4-C.
Drlg. 5,350 ft.

Plymouth Oil Co.'s No. 1-D E. H. Welder, 466 ft. from N line, 466 ft. SE of Ry., Sec. 1, Subd. No. 1, E. H. Welder ranch.
Comp. at 5,893 ft.; gas well; no gauge.

Sun Oil Co.'s No. 1 Stone, offset to Magnolia No. 1 Corpus Christi Bank.
Location.

Violet Oil Co.'s No. 1 Welder, 1,399 ft. from W line, 466 ft. from N line of 200-ac. tract, Sec. 47, Isaac Clover Sur.
D.&A. 6,008 ft.

**Los Olmos—Starr County**

H. C. Horter, Trustee, No. 1 Sanchez, 150 ft. from N and W lines Blk 3, Share 74, Porcion 72.
Sand 501-05 ft.; recemented bottom.

H. C. Horton's No. 2 Sanchez, 150 ft. NW cor. Blk. 3, Share 72, Porcion 72.
S.D. 501-5 ft.; standing.

Ed Linberg's No. 7 Bass, 1,500 ft. from W line, 1,675 ft. from N line of Share 6, Porcion 75.
S.D. 500 ft.

**Placetas—Starr County**

Hughston Oil Co.'s No. 1-A Gregg-Wood, S end of Por. 84; replacement well, 990 ft. S of State Highway No. 4.
3,370 ft.; S.D.

**Rio Grande—Starr County**

Hiram Reed's No. 5 D.&C., 475 ft. from E line, 185 ft. from N line of Blk. 6, Tract 21, Porcion 80.
M.I.M.

W. W. Zimmerman's No. 2 D.&C. 1,122 ft. W, 150 ft. from S line of Blk. 1, Tract A-77, Porcion 81.
Spudded in.

**Saxet—Nueces County**

Houston Oil Co.'s No. 4 Morgan, 660 ft. E of No. 3, Sec. 7, Range 5.
Drlg. 4,875 ft.

Houston Oil Co.'s No. 4 Walton, 330 ft. EW line, 1,560 ft. NS line.
Drlg. shale and lime 2,933 ft.; no report.

Magnolia Pet. Co.'s No. 2 W. W. Walton, 330 ft. from E line, 289 ft. from S line of 92.11-ac. tract, Enrique Villareal Sur. Location.

**Bruni—Webb County**

Associated Oil Co.'s No. 7 Bruni, 330 ft. from NW line, 660 ft. NE of No. 5, Blk. 7, M. Arispe grant.
Location.

Highland Oil Co.'s No. 8 Bruni, 1,650 ft. from NW line, 330 ft. from NE line, Sur. 7.
Coring 2,407 ft.; had sand 2,387-94 ft.; no report.

Highland Oil Co.'s No. 12 A. M. Bruni Estate, 520 ft. E of No. 6, 330 ft. from S line of 200-ac. tract, M. Arispe grant.
Location.

Ed Mims' No. 2 Benavides, 347 ft. NW line, 313 ft. SW line, Blk. 252, Arispe grant.
Comp.; 15 bbls. per hour at 2,807 ft.

O. W. Killam's No. 39 Bruni, C Blk. 50, Sur. 15.
Location.

**Laurel—Webb County**

South Texas Oil Co.'s No. 1-A, Sec. 269, Blk. 2, C.C.S.D. & R.G.N.G. Sur.
Drlg. 460 ft.

**West Cole Pool—Webb County**

Ross Barnhart's No. 1 de la Garza, 1,500 ft. from N line, 200 ft. from E line of Sur. 242.
Drlg. 2,483 ft.

Magnolia Pet. Co.'s No. 4 Volpe-Benevides, 1,948 ft. from E line, 200 ft. from S line of Sur. 660.
Csg. 2,342 ft.; W.O.C.

Magnolia Pet. Co.'s No. 5 Seacord-Benevides, 313 ft. SW line, 347 ft. NW line, Blk. 291, Arispe grant.
Comp.; 10 bbls. per hour at 2,798 ft.

James F. Nash's No. 1 Benevides, 347 ft. from NW line, 313 ft. from SW line, Blk. 184, Arispe Grant.
Drlg. 750 ft.

Texas Co.'s No. 1 S Benavides, Blk. 257, 347 ft. from NW line, 313 ft. from SW line.
Comp.; 25 bbls. per hour at 2,761 ft.

**Lopez—Webb County**

Mills Bennett's No. 3 Lopez, 600 ft. N of No. 2, 2,310 ft. from W line, 2,124 ft. from N line of Sur. 73.
T.D. 3,324 ft.; abnd.

G. G. Mortimer's No. 1 Lopez, 1,333 ft.; S line, 2,310 ft. W line, Share 16, Sur. 73.
Drlg. 605 ft.

**Noack—Williamson County**

Coffield & Lanning's No. 3 Heap, 200 ft. from N line, 225 ft. from W line of tract in White Sur.
Location.

G. G. Mortimor's No. 1 Lopez, 1,333 ft. from S line, 2,310 ft. from W line, Share 16, Sur. 73.
Drlg. 800 ft.

R. R. Ogden's No. 1 Matteck, 150 ft. N and W lines of 108.5-ac. tract in White Sur.
Location.

W. L. Stephens' No. 1 J. P. Carlson, 200 ft. out of NW cor., 900 ft. SE line, 610 ft. SW line of Samuel C. Jones Sur.
T.D. 945 ft.; S.D.

**Byersville—Williamson County**

Taylor Ref. Co.'s No. 9-A Sladek, H. White Sur., 150 ft. from NE line, 1,200 ft. SE line (creek).
Shale 700 ft.; S.D.

**Charco Redondo—Zapata County**

Schimmel et al's No. 1 Martinez, 330 ft. from SE line and 347 ft. from NE line, Blk. 125, Share 1, Grullo Grant.
2,013 ft.; resume drlg.

**Escobas—Zapata County**

G. E. Glasco's No. 1 Haynes, 200 ft. NW and SW lines Blk. 7, Haynes Subd., Comitas & Villa Grants.
Rig.

**Lopena—Zapata County**

Humble Oil & Refg. Co.'s No. 1 Dominguez, 12,785 ft. from NE line, 1,320 ft. from SE line of Porcion 31.
Drlg. sandy shale 2,527 ft.

Trowel et al's No. 1 W. Z. Guerra.
Coring brittle shale 1,790 ft.; no report.

**Mirando Valley—Zapata County**

C. L. Smith's No. 1 Robert Hinnant, 330 ft. out of NW cor. Sec. 307, Blk. 27, F. M. Makeig Sur.
T.D. 2,505 ft.; testing 1,439 ft.

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# E. C. TEXAS WILDCATS

Week Ending August 3

**Wildcats—Anderson County**

J. W. Luttes' No. 1 C. McKee, 2,640 ft. from N line of lease and survey and 330 ft. from W line of McKey 800-ac. tract.
Elev. 391 ft.; S.D. 4,516 ft.

**Camp Hill Area**

Gulf Prod. Co.'s No. 2-A Southern Lbr. Co., 330 ft. W along N line of 115.9-ac. tract from SE cor. of L. B. Ross' 37.6-ac. tract, and 330 ft. S at R/A, south offset to No. 1 Ross.
Elev. 598 ft.; Austin chalk 4,890-5,105 ft.; T.D. 5,122 ft.; to make test.

Gulf Prod. Co.'s No. 3-A Southern Lbr. Co., 330 ft. N along W line of 115.9-ac. tract from SE cor. of D. A. Maddox 106-ac. tract, and 330 ft. E at R/A, east offset to No. 1 Maddox.
Elev. 598 ft.; base Pecan 4,234 ft.; top Austin 4,871 ft.; coring 5,055 ft.

**Cayuga Area—Anderson County**

Tide Water Oil Co. et al's No. 21-A Wells, 4,079 ft. N and 2,333 ft. W of lease, S. Edmondson Sur. (Trinity test).
T.D. 8,925 ft.; 7-inch csg. set 8,746 ft.; waiting on cement to set.

**Long Lake Area—Anderson County**

Tide Water Oil Co. et al's No. 1 Shaw and Cern, 1,400 ft. from S and 2,333 ft. from E line, in D. Parker Sur.
Running csg.; T.D. 5,377 ft.; P.B. 5,345 ft.; waiting on cement to set.

**Angelina County**

Howze Oil Co.'s No. 1-C Finley, 150 ft. out of NW cor. of 85-ac. tract, 7 miles NE of Lufkin, Bluford Mitchell Sur.
Location.

**Bowie County**

Tex-Ark. Oil Co.'s No. 1 Hamilton Estate, 600 ft. E and 350 ft. N lines, J. Milan Sur., 4 miles S of Red River.
S.D. 1,121 ft.

Woodley & Bentley's No. 1 Lumpkin, 330 ft. out of NE cor. of 245-ac. tract, J. McDermot Sur., 1 mile SW of Dalby Springs.
Rigged up.

**Cherokee County**

O'Connor and St. Germaine Oil Co.'s No. 1 Long, 150 ft. E and 450 ft. E. G. S. Long Sur., 2 miles S of Mount Selman.
Elev. 668 ft.; S.D. 4,956 ft.; Pecan 3,622-4,022 ft.; Austin 4,566-4,744 ft.

Shell Pet. Corp.'s No. 1 New Birmingham Dev. Co., 190 ft. S and 150 ft. E from SE cor. T. J. Wood 160-ac. lease Levi Jordan Sur.
Base Austin 5,196 ft.; top Woodbine 5,196 ft.; T.D. 5,224 ft.

S. Thompson's No. 1 G. H. Allen, 330 ft. out of SW cor. 150-ac. tract, Wm. King Sur., 3 miles S of Hughes Spring.
Location.

Wilson Stubbs Oil Co.'s No. 1 Rowborts, 450 ft. from S line, 150 ft. from W line of 100-ac. tract, 2 miles SW of Jacksonville, J. D. Wolfin Sur.
S.D. 1,553 ft.

**Fannin County**

B. F. Allen's No. 1-B Argo, center of 16½-ac. tract in J. G. Swisher Sur., 1 mile S of Ector.
S.D. 405 ft.

Warner Moore et al's No. 1 Hancock, 400 ft. from W and 150 ft. N lines, Sec. 16, L. M. Baldock Sur., ½ mile S of Trenton.
Drlg. 543 ft.

**Freestone County**

Hoover et al's No. 1 McFall, 150 ft. S and W lines, S. Garrison Sur., E of Mexia.
Derrick.

J. E. Milburn's No. 1 S. E. McShan, 4,000 ft. NW and 5,000 ft. NE of tract, 3 miles SE of Donie, G. Diaz Sur.
S.D. 270 ft.

**Gregg County**

O. T. Clark's No. 1 Williams, 2,100 ft. from S and 2,400 ft. from W of D. Hill Sur., 3 miles NE of Longview.
S.D. 3,710 ft.

L. P. Kean's No. 1 S. M. Smith, 1,000 ft. E and 1,250 ft. S of W. W. Avery Sur., 4 miles SE of Gladewater.
S.D. 1,420 ft.

**Henderson County**

Kirby Pet. Co.'s No. 1 C. L. Litchfield, 600 ft. N and 350 ft. W, I. Clendennen Sur.
Location.

Taubert & McKee's No. 2 M.T. Todd, 2,750 ft. from NE and 3,970 ft. from SE lines of Sur., Geo. Aldrich Sur., 2 miles SE of Malokoff.
Elev. 359 ft.; Austin 3,360 ft.; drlg. 3,435 ft.

J. K. Wells' No. 1 W. E. Warren, 330 ft. out of NE cor. of Thos. Hanna Sur., 4 miles W of LaRue.
S.D. 250 ft.

H. M. Wilson's No. 1 fee, 970 varas S of NE cor. of 943-ac. tract, 5 miles N of Malahoff.
Derrick.

Worsham's No. 3 Wathen, 315 ft. N and 467 ft. E of 80-ac. lease, T. J. Lindsey Sur.
Elev. 327 ft.; top sand 4,073 ft.; drlg. plug 4,199 ft.

**Hopkins County**

D. A. Hale et al's No. 1 L. M. Hall, 200 ft. from N and E lines of 70-ac. tract, 1 mile SE of Miller Bros. A. Caro Sur.
S.D. 2,950 ft.; C.O.

**Hunt County**

Long & Wolfe et al's No. 1 A. L. Chapman, 375 varas from N and 2,060 ft. from W line of Enos Murphy Sur, 4 miles W of Greenville.
Top Pecan 740 ft.; drlg. 1,000 ft.

J. F. Morrissey & Co., Inc.'s No. 1 Fry, 643 ft. from N and 200 ft. from E of 146-ac. tract, 7 miles N of Commerce, C. Davis Sur.
Top Georgetown 3,013 ft.; elev. 562 ft.; S.D.

**Kaufman County**

Germany et al's No. 1 Clark, 951 ft. N and 1,000 ft. W of tract, S. Eden Sur.
T.D. 1,780 ft.

Murry & Emerson's No. 1 G. W. Martin, 1,660 ft. from W and 250 ft. from N of 140-ac. tract, from W. L. C. Butler Sur., 2 miles NE of Kemp.
S.D. 1,784 ft.

**Lamar County**

Gulf Petroleum Co.'s No. 1 A. L. Darnell, 1,490 varas from S and 1,080 varas from W line of H. L. Williams Sur., 4 miles NE of Paris.
Drlg. 1,012 ft.

**Leon County**

Killough & Tucker's No. 1 G. W. Lee, center of NE 10 acres of 230-ac. tract, J. Burleson Sur.
T.D. 5,641 ft.; P.B. to 5,600; drld. out to 5,620 ft., to test.

Tide Water Oil Co. et al's No. 1 G. W. Burkett, 1,435 feet from SE and SW lines of S. Sanches Sur. No. 7.
Drlg. 1,478 ft.

**Limestone County**

J. Edward Mills' No. 1 Hunt, 200 ft. from N. 350 ft. from W line 34.75-ac. tract, Israel Wood Sur., 3 miles NE of Kosse.
S.D. 3,802 ft.

Doughtry et al's No. 1 S. Welch, 150 ft. from NW and 900 ft. from NE of 77.64-acre tract in A. Varilia Sur., 4 miles W of Groesbeck.
S.D. 3,121 ft.

J. P. McKinney et al's No. 1 N. B. Boyd, 300 ft. NE of Magnolia's No. 26 Sarah McAnulty Sur.
S.D. 1,633 ft.

**McLennan County**

T. Cunningham's No. 1 M. G. McKee, 940 ft. from S and 3,640 ft. W of 640-ac. tract, M. Snell Survey, near Bruceville.
Location.

**Nacogdoches County**

Morrow et al's No. 1 Mrs. J. J. Holton, 900 ft. from W and 1,200 ft. from S

50-ac. tract, B. Flores Sur., 5 miles E of Nacogdoches.
S.D. 915 ft.

### Navarro County

W. J. Keeling et al's No. 1 J. F. Rushing 484 ft. from N line and 150 ft. from W line of 184-ac. tract, 6 miles SW of Richardson. Henry Ford Sur.
T.D. 2,895 ft.; to core.

McCullough et al's No. 1 C. Berry, 330 ft. from SE cor. of 35-ac. tract, 1 mile W of Dawson. William Moss Sur.
S.D. 1,460 ft.

Wiggins et al's No. 1 Donoho, 450 ft. from N and 1,101 ft. from E lines in John Couple Sur., SW of Corsicana.
S.D. 1,439 ft.

### Rains County

Allen & McClung's No. 1 Giles, T. Cunningham Sur., Abst. 143, 330 ft. from W line and 200 ft. from N line of 105-ac. Giles tract, 5 mi. SW of Emory.
Derrick.

Allen & McClung's No. 1 Ida Bullard, N. Brantely Sur., 1,300 ft. from W line and 200 ft. from N line of 25-ac. tract, 2 mi. SW of Emory.
Derrick.

### Red River County

Abercrombie et al's No. 2 Grant, 1,100 ft. N and 6,140 ft. W of P. D. Midkiff Sur., 8 miles NW of Clarksville.
Derrick.

R. H. Chew et al's No. 1 J. F. Brooks, 900 ft. N and 600 ft. of W line of 320-ac. tract, B. Gooch Sur., ½ mile S of Bagswell.
Derrick.

Joiner's No. 1 D. Rust, C. C. Wilborn Sur., 234 ft. N and 254 ft. W of most southerly SE cor. of Sur., just south of Avery.
Derrick.

### Rusk County

J. W. Shipman et al's No. 1 Citizens Natl. Bank, NE cor. of 125-ac. tract, J. J. Y'Barbo Sur., 4 miles NE of Henderson.
Elev. 432 ft.; S.D. 1,000 ft.

### Smith County

W. R. Harrison's No. 1 Rushing, J. Herring Sur. (O.W.D.D.)
S.D. 4,330 ft.

### Titus County

S. Rotondi's No. 1 Lillianstun, 1,200 ft. E from NW cor. of J. Bodt Sur. and 330 ft. N. but in W. H. Crawford Sur., 5 miles NE of Talco.
Elev. 301 ft.; derrick.

### Van Zandt County

J. Beren et al's No. 1 Bryant, 483 ft. N of same operator's dry hole, Nacogdoches County School Land Sur.
S.D. 1,325 ft.

Beren et al's No. 2 Palmer, 544 ft. from S and 686 ft. from E of 69.5-ac. tract, Nacogdoches County School Land.
S.D. 1,302 ft.

### Wood County

Hollandsworth Drlg. Co.'s No. 1 Little Sandy Hunting & Fishing Club, 400 ft. from N and 3,500 ft. E of James Hamblin Sur., 12 miles SE of Mineola.
Pecan Gap 3,200-3,335 ft., top Austin 4,514 ft.; drlg. 4,541 ft.

## Texas Panhandle Wildcats

Week Ending August 3

### Carson County

Danube Oil Co.'s No. 1 Byrum, 308 ft. from N and 409 ft. from E of N½ of NE¼ Sec. 107, Blk. 4, I.&G.N. Sur.
T.P. 3,095 ft.; T.D. 3,167 ft.; P.B. to 3,150 ft.; shot; C.O.

Robert Watchorn's No. 1 Eller, 330 ft. from S and E lines of W½ and SE¼ of Sec. 9, Blk. 7 H.&G.N. Sur.
T.D. 3,801 ft.; P.B. for gas.

### Childress County

Alma Oil Co.'s No. 1 Lowe, 660 ft. from N and W of SW¼ Sec. 417, Blk. H, W.&N.W. Sur., 8 of Kirkland.
Drlg. 5,845 ft.

Larkins & Warr's No. 1 M. F. Williams, at common corners of Secs. 507, 483, 484 and 508, Blk. H, W.&N.W. Sur.
Fishing 1,790 ft.

### Collingsworth County

Smith Bros.' No. 1 Pierce, C NE¼ Sec. 107, Blk. 21, H.&G.N. Sur.
S.D. 1,030 ft.

### Cottle County

Texas Co.'s No. 9 Johnson, 500 ft. N and 318 ft. W of most northerly cor. of J. A. Smith Sur.
Drlg. 3,412 ft.

### Dallam County

Eben Warner's No. 1 Jarboe, 1,520 ft. from S line, 415 ft. from W line, Sec. 2, B.&B. Sur.
S.D. 3,450 ft.

### Gray County

Bell O. & G. Co.'s No. 1 Furneaux, 434 ft. from S and E lines of SE¼ of Sec. 110, Blk. B-2, H.&G.N. Sur.
S.D. 3,262 ft. for connection.

Clark & Smith's No. 1-B Short, 126 ft. from N and 330 ft. from E of NW 40 acres, Sec. 2, Blk. 1, H.&G.N. Sur.

Drilling Exploration Co.'s No. 1 Lapold, 330 ft. S and W, Sec. 141, Blk. 3, I.& G.N. Sur.
Material.

Tom Doswell's No. 1 Herndon, 330 ft. from S and W lines of SE¼ of SW¼ of Sec. 166, Blk. 3, I.&G.N. Sur.

Farlins et al's No. 1 Ball, 330 ft. from S and E lines of NW¼ of Sec. 6, Blk. 3, B.B. Sur.
Drlg. 3,100 ft.

Hagy et al's No. 1 Chadwick, 320 ft. N and E. Sec. 210, Blk. B-21, H.&G.N. Sur.
Drlg. 2,955 ft.

Harry Foster's No. 1 Johnson, 330 ft. from N and E lines of Sec. 21, L. L. Erwin Sur.
S.D. 321 ft.

Warner's No. 1 Taylor, 330 ft. N and W of SE¼ Sec. 8, Blk. 8, A. W. Wallace Sur.
T.D. 3,116 ft.

McLaughlin et al's No. 1 Baggerman, 330 ft. from S and E of NW¼ Sec. 64, Blk. 3, I.&G.N. Sur.
Rig.

Plains Holding Co.'s No. 1 Morse-Gulf 330 ft. S and W, Sec. 57, Blk. 25, H.&G.N. Sur.
Material.

Taylor Oil Co.'s No. 1 Furneaux, 330 ft. from NE and W of S½ of SE¼ Sec. 101, Blk. B-2, H.&G.N. Sur.
Location.

Vulcan Oil Corp.'s No. 1-A Kinnard, 1,180 ft. from N and 150 ft. from W lines of E½ of SW¼ of Sec. 41, Blk. 25, H.&G.N. Sur.
T.D. 2,533 ft.

### Hall County

Davis et al's No. 1 Knorpp, 330 ft. S and W, Sec. 7, Blk. A, A.B.&M. Sur.
R.U. rotary.

### Hartley County

O. V. Beck et al's No. 1 Matador ranch, 350 ft. from N and W of most northerly NW cor., Sec. 20, Blk. 22, Capitol Syndicate Sur.
Drlg. 602 ft.

### Hutchinson County

Barnsdall Oil Co.'s No. 1 Lewis, 330 ft. N and E of W½ of E½, Sec. 7, Blk. 23, B.S.&F. Sur.
T.P. 2,895 ft.; T.D. 3,088 ft.; C.O. and swbng.

Gulf Prod. Co.'s No. 1 Pitcher, 330 ft. N and W, Sec. 19, Blk. M-21, T.C. Sur.
Rig.

Humble O. & R. Co.'s No. 1 Williams, Sec. 137, Blk. 5-T, T.&N.O. Sur.
Drlg. 2,200 ft.

Owl Oil Co.'s No. 1 Moore, 275 ft. S and W of NW 80 acres of NW¼, Sec. 21, Blk. M-21, T.C. Sur.
Drlg. 2,878 ft.

Phillips Pet. Co.'s No. 1 Daniel Dial, 330 ft. from S and 325 ft. from E lines of Sec. 36, Blk. M-23, T.C.R.R. Sur.
Location.

Power Pet. Co.'s No. 1 Hodges, 660 ft. S and E of most southerly 80 acres of S 160 acres of SE 200 acres, Sec. 16, Blk. M-35, T.C. Sur.
Rig.

Stinnett Oil Co.'s No. 1 Starnes, 330 ft. from N and 275 ft. from W of E½ of NW¼ Sec. 22, Blk. M-23, T.C. Ry. Sur.
C.O. 831 ft.

Texas Plains Oil Co.'s No. 1 State, 2,500 ft. SW of SW cor. of Sec. 15, Blk. 47, H.&T.C. Sur., and 330 ft. from N bank of Canadian River.
Drlg. 2,032 ft.

### King County

Davis, Heydrick et al's No. 1 Masterson, NE cor. Blk. 50, F. P. Knotts Sur.
S.D. 4,505 ft.

### Moore County

Alma Oil Co.'s No. 1 Ward, 330 ft. N and W of SW¼, Sec. 63, Blk. 44, H.&T.C. Sur.
Drlg. 3,703 ft.

Shamrock O. & G. Co.'s No. 1 Bruley & Ryan, C SW¼ of NE¼ Sec. 168, Blk. 3-T, T.&N.O. Sur.
S.D. 2,795 ft.

### Ochiltree County

U. S. Oil Corp.'s No. 1 W. R. Norris, 330 ft. S and 990 ft. E, Sec. 212, Blk. 43, H.&T.C. Sur.
Rigged up.

### Randall County

English et al's No. 1 Oxnard, 350 ft. from N and 1,320 ft. from E lines of NE¼ Sec. 85, Blk. 2, A.B.&M. Sur.
S.D. 5,685 ft.

### Wheeler County

Northern Texas Utilities' No. 1 Calhon, 330 ft. from N and E of SE¼, Sec. 72, Blk. 13, H.&G.N. Sur.
C.O. 2,155 ft.

Smith Bros.' No. 1-B Harlan, 330 ft. from N and 990 ft. from W lines of W½ of SW¼ of Sec. 49, Blk. 24, H.&G.N. Sur.
T.D. 2,583 ft.; 200 bbls. daily.

## WEST TEXAS WILDCATS

Week Ending August 3

### Andrews County

Crafton Oil Co.'s No. 1 Richard & McWhorter, C NE ¼ Sec. 13, Blk. A-30, 6 mi. SE of NW cor. of county.
Elev. 3,441 ft.; drlg. 3,612 ft.

Fuhrman Pet. Corp.'s No. 2 Ford, 440 ft. from S and 1,320 ft. from E, Sec. 16, Blk. A-43.
T.D. 4,047 ft.; setting liner.

Gulf Prod. Co.'s No. 1 J. S. Kelley, 1,320 ft. from S and E, Sec. 2, Blk. A-38.
S.D. 1,770 ft.

Humble Oil & Ref. Co.'s No. 5 Means, 654 ft. from S and 677 ft. from W, Sec. 4, Blk. C-46, P.S.L. Sur.
Drlg. 3,075 ft.

Humble Oil & Ref. Co.'s No. 4 Means, 1,982 ft. from N and 660 ft. from E, Sec. 12, Blk. A-35.
Rigged up.

Republic Prod. Co.'s No. 1 Boner-State, 2,200 ft. from S and 1,320 ft. from E, Sec. 25, Blk. A-43.
T.D. 4,505 ft.; shot twice; C.O.

Shell Pet. Corp.'s No. 1 J. S. Means, 660 ft. from S and 1,980 ft. from E lines of Sec. 2, Blk. A-35, P.S.L. Sur.
Drlg. plug 2,510 ft.

L. G. Stogner et al's No. 1 Mrs. C. George, 660 ft. from S and E, Sec. 25, Blk. A-22, P.S.L. Sur.
Ran csg. 1,650 ft.

Sun Oil Co.'s No. 1 J. S. Means, 1,980 ft. from S and 660 ft. from E lines of Sec. 8, Blk. A-35, P.S.L. Sur.
Location.

J. W. Trippiehorn's No. 1 Ogden, 330 ft. from S and 2,310 ft. from W lines of Sec. 6, Blk. A-46, P.S.L. Sur.
Elev. 3,211 ft.; fishing 4,160 ft.

Wahlenmaier et al's No. 1 Cox Estate, 1,320 ft. from N and W of Sec. 8, Blk. A-33.
T.D. 157 ft.; skidded drk. 8 ft. west.

### Brewster County

F. C. Dodson's No. 1 Texas American Syndicate, 660 ft. from N and E, Sec. 66, Blk. 10, G.H.&S.A. Sur.
Elev. 3,228 ft.; drlg. 1,726 ft.

Joiner et al's No. 1 McIntyre, 353 ft. from S, 2,390 ft. from E of Sec. 21, Blk. 352, W. M. Mitchell Sur.
S.D. 2,150 ft.

King & Franklin's No. 1 Gage Est., C Sec. 138, Blk. 22, G.H.&S.A. Sur.
Elev. 4,244 ft.; S.D. 1,305 ft.

G. H. Storey's No. 1 Wilson, 1,980 ft. from N and E lines of Sec. 3, Blk. 212, T.&St. L. Sur.
Elev. 3,609 ft.; S.D. 1,875 ft.

### Cochran County

Kelsey's No. 1 Slaughter, C Labour 36, League 150, R.C.S. Lands.
Derrick.

West Texas Development Co.'s No. 1 Slaughter, near C of Labour 53, League 149, Randall Co. School Lands.
S.D. 100 ft.

### Coke County

Haggerty et al's No. 1 Gaston, 340 ft. from S and 654 ft. from W, Sec. 11, Jos. Young Sur.
Fishing 3,225 ft.

### Concho County

Maverick Oil Co.'s No. 1 Jim Rice, 330 ft. from S and W lines of NW ¼ of Sec. 18, S.N. Ry. Sur.
Location.

### Crane County

American Liberty Oil Co.'s No. 1 Tubbs, 796 ft. from S and 330 ft. from W, Sec. 11, Blk. B-27, P.S.L. Sur.
Elev. 2,536 ft.; T.D. 4,015 ft.; set csg.

Dobbs Oil Co.'s No. 1 J. Cowden et al, 330 ft. from S and E of N half, Sec. 38, Blk. 1, H.&T.C. Sur.
Drlg. 1,112 ft.

Gulf Prod. Co.'s No. 10 Waddell, C NW ¼ Sec. 11, Blk. B-23.
Elev. 2,775 ft.; drlg. 3,465 ft.

Gulf Prod. Co.'s No. 1 Henderson, 1,312 ft. from S and 1,322 ft. from E, Sec. 3, Blk. B-23, P.S.L. Sur.
Elev. 2,778 ft.; shut in for storage 3,523 ft.

Gulf Prod. Co.'s No. 1 M. B. McKnight, 660 ft. from S and W, Sec. 9, Blk. B-21.
Elev. 2,778 ft.; T.D. 3,713 ft.; P.B. to 2,570 ft.; pumping mostly water.

Gulf Prod. Co.'s No. 1 Waddell, C NW NW Sec. 4, Blk. B-27, P.S.L. Sur.
Drlg. 5,100 ft.

H. L. Holloway's No. 1 Mayberry, 2,440 ft. from SW and SE, Sec. 17, Blk. 35, H.& T.C. Sur.
Drlg. 1,002 ft.

Magnolia Pet. Co.'s No. 1 Edwards, 330 ft. from S and 1,650 ft. from E, Sec. 2, Blk. B-23.
Elev. 2,778 ft.; T.D. 3,615 ft.; P.B. to 3,540 ft.; to acidize.

### Crockett County

Adkins Bros.' No. 1 Shannon, 320 ft. from S and 630 ft. from W of 80 in SW ¼ Sec. 27, Blk. WX, G.C.&S.F. Sur.
Machine.

Leslie-Hiller et al's No. 1 Todd, 1,200 ft. N and 330 ft. E, Sec. 36, Blk. WX, G.C.& S.F. Sur.
Drlg. 825 ft.

### Culberson County

Anderson-Prichard Oil Corp., Magnolia Pet. Co. et al's No. 1 Borders, 1,255 ft. N and 2,305 ft. from W, Sec. 34, Blk. 69, P.S.L. Sur.
Drlg. 1,800 ft.

Miller Bros.' No. 1 fee, 1,900 ft. from N and 660 ft. from E line of Sec. 21, Blk. 97, P.S.L. Sur.
S.D. 2,137 ft.

### Dawson County

Adams & Turner's No. 1 John Robinson, 1,320 ft. from N line, 1,320 ft. from W line of Sec. 46, Blk. M, E.L.R.R. Sur.
S.D. 4,860 ft.

O. F. Dickinson, trustee's No. 1 C. H. Doaks, 368 ft. from S and 330 ft. from E of SW cor., Sec. 4, Blk. H, E.L. Ry. Co. Sur.
S.D. 150 ft. in new hole.

### Ector County

Continental Oil Co.'s No. 1 Wight, 2,200 ft. from S and W, Sec. 21, Blk. 43, Twp. 1s, T.&P. Sur.
Drlg. 3,276 ft.

Gulf Prod. Co.'s No. 2 Goldsmith, 2,200 ft. from N and 440 ft. from E lines of Sec. 15, Blk. 44, Twp. 1s, T.&P. Sur.
Rigging up.

Eppenauer Drlg. Co. et al's No. 1 Wight, 440 ft. from N and W of NE ¼ Sec. 22, Blk. 43, Twp. 1s, T.&P. Sur.
Drlg. 3,365 ft.

Landreth Prod. Co.'s No. 1 Blakeney, 440 ft. from N and E, Sec. 28, Blk. 43, Twp. 1n, T.&P. Sur.
Elev. 3,066 ft.; T.D. 4,225 ft.; shot 300 qts. from 4,120-4,225 ft.; T.P. 4,195 ft.; flowing.

C. L. Peters' No. 1 Connell, 330 ft. from N and E lines of NW of Sec. 12, Blk. B-16, P.S.L. Sur.
T.D. 3,296 ft.; W.O.C.

Phillips Pet. Co. and Pure's No. 1 C. Cowden, 2,200 ft. from N and 440 ft. from W, Sec. 14, Blk. 44, Twp. 1s, T.&P. Sur.
Elev. 3,100 ft.; T.D. 4,171 ft.; to pull packer; flowed 160 bbls. in 24 hrs. through ½-in. choke.

Phillips Pet. Co. and Pure Oil Co.'s No. 2 C. Cowden, 440 ft. from S and W, Sec. 23, Blk. 44, Twp. 1s, T.&P. Sur.
Elev. 3,103 ft.; T.D. 4,120 ft.; T.P. 4,094 ft.; flowed 147 bbls. in 17 hrs.

Sun Oil Co's No. 1-B Wight, 2,200 ft. from S and 440 ft. from E, Sec. 10, Blk. 43, Twp. 1s, T.&P. Sur.
Set csg. 177 ft.

Roy Westbrook's No. 1 Yarbrough & Allen, 440 ft. from N and W, Sec. 26, Blk. B-14, P.S.L. Sur.
Location.

### El Paso County

Tri-State Oil Co.'s No. 1 Kinkel, 190 ft. from N and 550 ft. from E, Sec. 237, A.T.&S.F. Sur.
T.D. 750 ft.; running csg.

### Glasscock County

John I. Moore et al's No. 1 J. S. McDowell, 1,980 ft. from N line and 660 ft. from E line of Sec. 22, Blk. 34, Twp. 2s, T.&P. Sur.
Topped lime 9,471 ft.; show oil and gas 9,484-9,520 ft.; increase oil 9,594-9,600 ft. and 9,633-55 ft.; acidized with 6,000 gallons at 10,115 feet; bailing; showing no oil or water.

### Howard County

John I. Moore et al's No. 1 Snyder, 330 ft. from S and W, Sec. 28, Blk. 30, Twp. 1s, T.&P. Sur.
Elev. 2,302 ft.; S.D. 3,010 ft.; to shoot.

### Jeff Davis County

C. M. Joiner's No. 1 Jones & Coffield, 770 ft. from N and 1,322 ft. from E, Sec. 8, Blk. 3, H.&T.C. Sur.
Fishing 1,610 ft.

### Jones County

J. W. Barton's No. 1 C. W. Logsdon, 150 ft. from N and 150 ft. W of Wichita Valley R.R. Sur., but in Hy. Millard Sur.
Drlg. 1,620 ft.

Campbell et al's No. 1 Rowell, in E half of W half, Sec. 6, T.&P. Sur.
S.D. 2,075 ft.

R. L. Crawford's No. 1 Wattzer, 200 ft. from S and W, Sec. 1, T.&N.O. Sur.
Drlg. 1,456 ft.

Condor Pet. Co.'s No. 1 Asa Holt, 200 ft. from S and E lines of Sec. 2, Blk. 20, T.&P. Sur.
T.D. 1,820 ft.; underreaming csg.

Davenport & Hughes' No. 1 J. D. Farrell, 1,100 ft. from N and 1,540 ft. from E. Sec. 6, Blk. 15, T.&P. Sur.
Drlg. 1,700 ft.

A. B. Farris et al's No. 1 J. W. Jennings, 1,980 ft. from S and 660 ft. from E, Sec. 207, B.B.B.&C. Sur.
T.P. 2,040 ft.; T.D. 2,041 ft.

N. H. Martin & Son's No. 1 King, 200 ft. from N and W of E half, Sub. 5, M. Bueno Sur. 197.
Drlg. 1,525 ft.

Sandy Ridge Oil Co.'s No. 3 Jones, 1,520 ft. from N and 660 ft. from W, Sec. 5, Blk. 15, T.&P. Sur.
Location.

### Kimble County

Wilcox Oil & Gas Co.'s No. 1 J. Patterson, 200 ft. from N and E, Sec. 1, D.&P.R.R. Sur.
T.D. 2,275 ft.; straightening hole.

### Loving County

D. C. Evans' No. 1 W. D. Johnson, 2,310 ft. from N and 1,650 ft. from W, Sec. 12, Blk. 57, Twp. 1, T.&P. Sur.
Drlg. 2,224 ft.

Mason Oil Co.'s No. 1 Kyle, 1,980 ft. from S and E, Sec. 22, Blk. 65, Twp. 1, T.&P. Sur.
T.D. 2,800 ft.; underreaming csg.

### Lynn County

Hart Oil Co.'s No. 1-A Edwards, 425 ft from N and 865 ft. from E lines, Sec. 29, Blk. 1, L.&S.V. Sur.
Drlg. new hole at 3,303 ft.

### Martin County

Wright & Scott's No. 1 Flannigan, 330 ft. N and E, Sec. 22, Blk. 37, Twp. 1s, T.&P. Sur.
S.D. 100 ft. for csg.

### McCulloch County

Poulter et al's No. 2 Wyres, 50 ft. from S and 160 ft. from W, P. W. Rocins Sur.
Drlg. 550 ft.

### Mitchell County

Lockhart et al's No. 1 W. C. Berry, 330 ft. from N and 2,310 ft. from E, Sec. 89, Blk. 97, H.&T.C. Sur.
Spudder.

Sawtell & Grueber's No. 1 Morrison.
Drlg. 2,542 ft.
Texas Co.'s No. 1 Terry, 300 ft. from S and 1,650 ft. from E of W 485 acres, Sec. 62, Blk. 29, W.&N.W. Sur.
Drlg. 2,910 ft.

**Nolan County**

Harris et al's No. 1 Georgia Institute of Technology, 330 ft. from S and 1,320 ft. from W, Sec. 89, Blk. 24, T.&P. Sur.
Location.

**Pecos County**

Comanche P. L. Co.'s No. 1 Schreff-Blackmore, 330 ft. from SW and 1,650 ft. from SE lines of Sec. 38, Blk. 3, H.&T. C. Sur.
C.O. 100 ft.
Gulf Prod. Co.'s No. 7 White & Baker, 330 ft. from N and E, Sec. 15, Blk. Z, T.C.Ry. Sur.
Location.
W. Hicks' No. 1 Fromme, 1,980 ft. from NE and 2,310 ft. from SE, Sec. 106, Blk. 10, H.&G.N. Sur.
Location.
C. R. Richards' No. 4 Courtney, 929 ft. from N and W, Sec. 78, Blk. OW, 360 ft. S of No. 2.
Elev. 2,967 ft.; S.D. 362 ft.
Trans-Tex. Oil Co.'s No. 1 Caldwell, 330 ft. from E line and 330 ft. from S line of Sec. 27, Blk. 40, Twp. 9, T.&P. Sur.
T.D. 2,509 ft.; underreaming csg.

**Reagan County**

Dobbs Oil Co.'s No. 2 Friend, 660 ft. from W and 1,375 ft. from S, Sec. 3, Wm. Allen Sur.
Location.
Dobbs' No. 1 Friend, 2,310 ft. from S and 660 ft. from W of Blk. 3, Wm. Allen Sur., 3 or 4 miles S of Big Lake.
S.D. 2,464 ft.; P.B. to 2,440 ft.; rerunning tubing to pump.
Culberson & Irvin's No. 1 Ringo.
T.D. 711 ft.; S.D.

**Reeves County**

Dunigan's No. 1 Davis, 330 ft. from N and W, Sec. 7, Blk. 58, P.S.L. Sur.
Location.
Grisham-Hunter Corp.'s No. 1 T. P. Land Trust, 1,320 ft. from S and W lines, Sec. 27, Blk. 57, Twp. 2, T.&P. Sur.
Drlg. 142 ft.
Herbert Oil Co.'s No. 1 Williams & Walker, 5,280 ft. from S and 1,320 ft. from E, Sec. 17, Blk. 6, H.&G.N. Sur.
Elev. 2,536 ft.; drlg. 4,309 ft.
K. Slack et al's No. 1 Reeves, C NW ¼ Sec. 20, Blk. 56, P.S.L. Sur., 22 mi. N of Toyah.
Drlg. 1,965 ft.; good show of gas.
Washington Oil Co.'s No. 1 J. M. Radford Grocery Co., 2,640 ft. from S and 340 ft. from E, Sec. 39, Blk. 56, P.S.L. Sur.
T.D. 502 ft.

**Runnels County**

Wolverton's No. 1 Willingham, 200 ft. from river and in C of Wilhelm-Wolfgang Sur. No. 425, 1¼ mi. SE of Ballinger.
Drlg. 3,424 ft.

**Schleicher County**

John M. Cooper et al's No. 1 Bert Page, 1,320 ft. from N line, 1,470 ft. from W line of Sec. 40, Blk. L, G.H.&S.A. Sur.
T.D. 6,257 ft.; to deepen.
W. C. Proctor et al's No. 1 Judkins & Spencer, C SW ¼ Sec. 4, Blk. V-28.
T.D. 1,571 ft.; ran 10-in. csg.

**Scurry County**

Coffield & Guthrie's No. 1 Wade, 990 ft. from N and 330 ft. from W, Sec. 115, Blk. 97, H.&T.C. Sur.
Moving in tools.
M. L. Goos et al's No. 1 J. E. Murphy, 330 ft. from N and 1,650 ft. from E, Sec. 114, Blk. 97, H.&T.C. Sur.
Elev. 2,287 ft.; T.D. 2,343 ft.; shot; C.O.
Magnolia Pet. Co.'s No. 1 W. M. Scott, 330 ft. from S and W, Sec. 186, Blk. 3, H.&G.N. Sur., 5 mi. S of Snyder.
Location.

**Sutton County**

Paul C. Teas' No. 1 G. S. Allison, 660 ft. from S and W, Sec. 49, Blk. A, G.W.T. &P. Sur.
Location.

**Taylor County**

Anderson et al's No. 1 J. C. High, 2,310 ft. from N and 990 ft. from E, Sec. 8, L.&L. Sur.
Rigged up machine.
Hickok's No. 1 Tittle, 660 ft. from N and W, Sec. 37, Blk. 19, T.&P. Sur.
S.D. 283 ft.
Skaggs & Brewer's No. 1 McClure, 330 ft. from N and E, S half SW Sec. 3, L.A.L. Sur.
T.D. 1,910 ft.; C.O. after acidizing.

**Tom Green County**

Twin Oil Co.'s No. 1 W. E. Green, 1,950 ft. from N and 1,400 ft. from W, L. P. Moore Sur. 169½.
S.D. 315 ft.

**Upton County**

Gulf Prod. Co.'s No. 103 McElroy, 1,980 ft. from S and 660 ft. from W, Sec. 197, Blk. F, C.C.S.D.&R.G.N.G. Sur.
T.D. 12,786 ft.; P.B. 8,290 ft.
Humble Oil & Ref. Co.'s No. 1 Pollock, C of NW, Sec. 4, Blk. M.
Drlg. 3,254 ft.
J. G. McKenzie's No. 1 Taylor, 1,650 ft. from S and 330 ft. from E lines of Sec. 22, Blk. B-2, G.H.&S.F. Sur.
Drlg. 140 ft.
W. C. Ray's No. 1 Cordova-Union, 2,035 ft. from S and 2,895 ft. from W of NE ¼ Sec. 3, A.H. Sur., 5 mi. SE of McCamey.
Location.

**Ward County**

Alexander's No. 1 Richter, 1,650 ft. from NW, 1,170 ft. from NE line of Sec. 27, Blk. 34, H.&T.C. Sur.
T.D. 2,455 ft.; to run tubing and test.
California Co. et al's No. 1 McFarland, 990 ft. from NE and 330 ft. from SE, Sec. 29, Blk. 34, H.&T.C. Sur.
Cellar.
California Co.'s No. 1 Walling & Costley, 2,310 ft from SE and 330 ft. from NE lines of Sec. 18, Blk. 34, H.&T.C. Sur.
Cellar.
Caprito's No. 1 Hardage & Wilson, 2,310 ft. from NE and 990 ft. from SE, Sec. 11, Blk. 34, H.&T.C. Sur.
Drlg. 2,500 ft.
Eastland Oil Co.'s No. 1 Johnson, 330 ft. NW and NE, Sec. 24, Blk. 34, H.&T.C. Sur.
S.D. 2,570 ft.
Skelly Oil Co.'s No. 1 Citizens Natl. Bank, 330 ft. from SE and SW lines of Sec. 40, Blk. 34, H.&T.C. Sur.
Drlg. 2,282 ft.
Jerry Sines' No. 1 Brown, 330 ft. from NW and NE, Sec. 13, Blk. 5, H.&T.C. Sur.
T.D. 3,148 ft.; P.B. 3,075 ft.; S.D.
Abell Brothers' No. 1 Potts, 2,310 ft. from SE and 990 ft. from SW lines of Sec. 28, Blk. B-29, P.S.L. Sur.
Drlg. 2,315 ft.
West Texas O. & R. Co.'s No. 1-C University, 330 ft. from N and E, Sec. 6, Blk. 16.
T.D. 2,668 ft.; P.B. 2,567 ft.; to shoot.

**Winkler County**

Barnsdall Oil Co.'s No. 1 Brown & Altman, 2,310 ft. from S and E, Sec. 6, Blk. B-5.
Elev. 2,844 ft.; T.D. 3,218 ft.; P.B. to 2,195 ft.; put on pump.
Emperor Oil Co.'s No. 1 Halley, 1,650 ft. from S and 330 ft. from E, Sec. 12, Blk. B-12.
Elev. 2,764 ft.; T.D. 2,690 ft.; gas killed to deepen.
Fox & Butler's No. 1 Brown & Altman, 2,310 ft. from S and 1,650 ft. from E, Sec. 6, Blk. B-5.
Elev. 2,847 ft.; drlg. 3,035 ft.
Gulf Prod. Co.'s No. 1 Keystone Cattle Co., NE of NW, Sec. 10, Blk. B-3, P.S.L. Sur.
Elev. 2,942 ft.; shut in 3,520 ft.
Gulf Prod. Co.'s No. 2 Keystone Cattle Co., NW cor. Sec. 17, Blk. B-3.
Elev. 2,951 ft.; T.D. 3,702 ft.; shot; flowed 135 bbls. in 24 hrs., 35.2 grav.
Gulf Prod. Co.'s No. 3 Keystone Cattle Co., 330 ft. from N and W of NE ¼ Sec. 11, Blk. B-3.
T.D. 3,363 ft.; drilled plug; cleaned self.
Gulf Prod. Co.'s No. 4 Keystone Cattle Co., 330 ft. from N and E, Sec. 20, Blk. B-3.
Tested 3,513-3,602 ft.; but little oil.
Gulf Prod. Co.'s No. 5 Keystone Cattle Co., 330 ft. from N and W of SW ¼ Sec. 6, Blk. B-2.
Elev. 2,952 ft.; T.D. 3,500 ft.; standardized; flowed 106 bbls. oil and 5 bbls. water in 24 hrs.
Gulf Prod. Co.'s No. 6 Keystone Cattle Co., 330 ft. from N and W of NE ¼ Sec. 16, Blk. B-2.
Elev. 2,950 ft.; T.D. 3,550 ft.; drlg. 3,555 ft.; 600 ft. oil in hole.
Gulf Prod. Co.'s No. 7 Keystone Cattle Co., 330 ft. from N and W of SW ¼ Sec. 14, Blk. B-2.
Elev. 2,954 ft.; killed gas at 2,500 ft. to deepen.
Gulf Prod. Co.'s No. 8 Keystone Cattle Co., 330 ft. from S and W of Sec. 13, Blk. B-2.
Elev. 2,964 ft.; drlg. 2,900 ft.
Gulf Prod. Co.'s No. 9 Keystone Cattle Co., 330 ft. from S and W of Sec. 18, Blk. B-2.
Elev. 2,946 ft.; drlg. 2,625 ft.
Harry Adams' No. 2 Scarborough, 990 ft. from N line and 990 ft. from W line, Sec. 2, Blk. 77, P.S.L. Sur.
Drlg. 3,044 ft.; flowing 15 to 20 bbls. day.
Humble Oil & Ref. Co.'s No. 2-A Walton, 660 ft. from S and W, Sec. 48, Blk. 38.
Cable tools.
K-D Oil Co.'s No. 1 P. Mitchell, 1,650 ft. from N and 2,310 ft. from E, Sec. 33, Blk. B-10, P.S.L. Sur.
Cable tools rigged up.
J. C. Maxwell's No. 1 Brown & Altman, 2,310 ft. from N and 990 ft. from W, Sec. 6, Blk. B-5.
Elev. 2,844 ft.; drlg. 3,135 ft.
Mascho Oil Co.'s No. 1 Evans, 1,170 ft. from N and 1,320 ft. from W, Sec. 46, Blk. 73, P.S.L. Sur.
S.D. 50 ft.
Richardson's No. 1 Walton, 440 ft. from S and 2,200 ft. from W, Sec. 1, Blk. B-3.
Location.
Richardson's No. 1 Walton, 1,010 ft. from S and 330 ft. from W, Sec. 1, Blk. B-3.
T.D. 3,600 ft.; flowed 308 bbls. fluid, 8 per cent water and 69 per cent mud.
Skelly Oil Co.'s No. 2 Halley, 1,320 ft. from N and 2,200 ft. from E, Sec. 25, Blk. B-11, P.S.L. Sur.
S.D. 3,090 ft.
Skelly Oil Co.'s No. 3 Halley, 2,200 ft. from N and 1,320 ft. from E, Sec. 25, Blk. B-11.
Drlg. 3,106 ft.
Sioux Oil Co.'s No. 1 Lowett, 330 ft. from N and E, Sec. 26, Blk. 26, P.S.L. Sur.
T.D. 2,742 ft.; recemented csg.
Sun Oil Co.'s No. 1 Halley, 2,200 ft. from N and 440 ft. from E, Sec. 24, Blk. B-12, P.S.L. Sur.
T.D. 3,170 ft.; P.B. 2,732 ft.
Weaver et al's No. 1 T. Morton, 330 ft. from S and E of N half, Sec. 11, Blk. B-12.
Elev. 2,767 ft.; T.D. 2,948 ft.; P.B. 2,937 ft.; to shoot.
Wilgo Oil Corp.'s No. 1 Campbell, 900 ft. from N and 300 ft. from E, Sec. 2, Blk. 5, P.S.L. Sur., 3 mi. E of Kermit.
Elev. 2,884 ft.

**Yoakum County**

C. J. Davidson et al's No. 1 Bennett ,1,320 ft. from N and E, Sec. 678, John H. Gibson Sur.
Elev. 3,557 ft.; drlg. 3,582 ft.


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## Meter Fuel Oil

CHICAGO, Aug. 5.—The metering of furnace oils delivered from tank trucks to domestic consumers in the Chicago area is now considered in the trade a foregone conclusion, based on the fact that the utilities committee of the Chicago city council on August 1 voted to recommend passage of such an ordinance by the council. Possibilities of complications for the oil industry by the measure are foreseen by the fact it does not restrict the requirement for metering to domestic heating oils. Theoretically, the measure applies also to gasoline and to heavy fuels. However, an informal understanding is that the city sealer's office will withhold enforcement from such cases until an amendment is passed specifically exempting such cases. Numerous fuel oil distributors already have installed meters on trucks for the lighter fuels and in general they have not opposed passage of the ordinance. However, the Burning Oil Distributors Association of Chicago urged specific limitations of the measure's applicability to oils where metering would be practicable.

## Oil Industry Safety

All-industry accident severity increased 5 per cent in 1934; petroleum-industry accident severity decreased 11 per cent, and was below the average severity for all industries for the first time since records have been kept. The national fatality rate increased 11 per cent; the petroleum-industry fatality rate decreased 17 per cent. All-industry accident frequency increased 5 per cent; petroleum-industry accident frequency increased 10 per cent. Accidents in the petroleum industry were 6.4 less frequent than in all industries.

# QUESTIONS ON TECHNOLOGY

By Charles K. Francis, Ph. D., Technical Editor

## Vanadium and Nickel Are Typical Mineral Elements of Petroleum

**What metals are considered to be normal constituents of petroleum? Is there any metal or group of metals especially common to petroleum?—E. D. G.**

Gurwitsch-Moore in Petroleum Technology, page 173, mentions the several mineral elements that have been found in petroleums, which produced an ash representing 0.0032 to 0.0138 per cent of the crude oil, the samples of oil being from the Baku district. The variation in the quantity of ash suggests that there must be a great difference in the mineral content. The notable occurrence is nickel and vanadium.

A recent review mentions the same elements as those listed by Gurwitsch and gives some additions. This is the short outline from Rept. Argentine Chem. Soc. 117, 5, 1934, published as The Mineral Contentent of Petroleum, by E. Longobardi, in J. Inst. Pet. Tech. 21, 132, 1935. An oil produced an ash of 0.0377 per cent which contained 11.93 per cent vanadium oxide. The mineral elements mentioned as constituents of petroleum include: Silicon, arsenic, phosphorus, aluminum, iron, calcium, magnesium, copper, silver, gold, vanadium, sodium, titanium, lead, tin, nickel, manganese, chromium, barium, strontium, potassium and lithium.

Most of these are explained as being present in crude oil due to the type of rocks with which it has been in contact. It is suggested that vanadium found in various lignites, bituminous shales, natural asphalts and petroleum is in too great a proportion and too widely distributed to be explained only by its wide diffusion in nature. Longobardi and Camus found the vanadium oxide to sulphur ratio in Rafaelite to be 9.27 and in the San Rafael petroleum the ratio was 9.65. It is proposed that the vanadium in Rafaelite was derived from the crude petroleum and from its mother substance, and that filtration through the earth would have the effect of eliminating vanadium by absorption, but would not incorporate it in the bitumen. The tentative hypothesis of Tester suggests a genealogical sequence in which vanadium coming from eruptive rocks passes to the state of the oxide ($V_2O_5$) dissolved in water; thence, by means of precipitation, together with iron and nickel, to the sulphide ($V_2S_3$) by reaction with hydrogen sulphide produced by thiobacilli, and finally the formation of mud with the intervention of other microflora and animal remains and the production of bituminous shales, petroleum, asphalt, and asphaltites. The highly paraffinic oils contain the smallest quantity of total mineral matter and consequently but few mineral elements.

No other regularity of a mineral constituent of petroleum has been discovered.

## Pipe Line and Railroad Movements of Gasoline to Market Centers

**I am anxious to learn if the pipe line method of transporting motor fuel is a successful one and is the trend toward less and less use of tank cars and a greater use of pipe lines and motor trucks? Do you have statistics covering the growth of gasoline pipe lines? Are there any under construction or in prospect?—P. M. C.**

Relatively short pipe lines for the transportation of gasoline, chiefly casinghead gasoline, are reported to have been in service about 25 years ago in West Virginia, California and Oklahoma, but the first one of appreciable length appears to have been the welded 3-inch line from the Salt Creek Field to Casper, Wyo., a distance of 40 miles, by the Midwest Refining Co. In 1928, the Shell Oil Co. built a gasoline line 97½ miles long in California. During the past six years there has been an extensive building of pipe lines for the transportation of finished gasoline.

The Tuscarora Oil Co. reversed the flow direction to western movements in 1929. This line had moved crude oil east for many years but after cleaning it was put into gasoline service, pumping from Bayway, N. J., to the western edge of Pennsylvania, on the Ohio River. During 1930 and 1931 several gasoline pipe lines were put into operation. Included are the Susquehanna Pipe Line Co. of the Sun Oil Co., from Marcus Hook, near Philadelphia, Pa., to Pittsburgh, Akron and Cleveland. The Standard Oil Co. of New York constructed a gasoline line from Providence, R. I., to Worcester and Springfield, Mass. The Phillips Pipe Line Co. put in an 8-inch line from Borger, Tex., to St. Louis, 681 miles long. Probably the longest pipe line for transporting commercial gasoline is the Great Lakes Pipe Line, put into operation in 1930, 1,350 miles long. This line starts at Okmulgee, Okla., with connections at other refining centers and delivers gasoline at Kansas City, Des Moines, St. Paul and Chicago, with several branch lines connected. Additional lines are building.

This development, taking place in a few years, may be explained as the result of an endeavor by the petroleum refiner to extend his marketing territory, the transportation costs on the finished gasoline being the limiting factor. This condition has been analyzed in an article in The Oil and Gas Journal, October 25, 1934, page 105 from which I shall quote:

"As the crude oil pipe line had relieved a similar condition in the early development, it became evident that a gasoline pipe line would relieve the situation that was becoming so critical.

"A gasoline pipe line is possible where economical volumes are involved. Figures of cost and operation will show the refiner the volumes that can be economically handled, presuming of course, that rail transportation tariffs are greater than pipe line pumping costs. A canvass of tariffs over the territories to be served will quickly determine this point.

"Rail transportation by tank car can be analyzed with various assumptions from the terminals of the proposed pipe line. Before any definite proposal, however, can be made involving the construction of a pipe line, short line haul tariffs must be definitely set, and truck transportation as a substitute for tank car transportation must be analyzed, bearing in mind the limits that can be reached by truck transportation. After all short line tariffs are established, it will be shown that combination pipe line and railroad is a very logical arrangement."

Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit problems to Dr. C. K. Francis. Questions should give as much detail as possible. Inquiries must be signed but only the given initials will be printed. The source of questions is considered confidential. Questions requiring discussion of patents, the use of intricate formulas, extended computations, or cost estimates cannot be considered in these columns

## Solubility of Methane in Other Light Hydrocarbons

**Do you have any information showing the extent to which methane is soluble in other hydrocarbons? Can the solution of methane be considered as liquid methane when the temperature is above the boiling point of methane?—H. T. C.**

It may be considered that the lower hydrocarbons, including methane, are soluble to some extent in the higher hydrocarbons. This subject was mentioned in the contribution of Newman and Pilat, in The Oil and Gas Journal, April 25, 1935, page 13. The references are those given by the authors.

Fischer and Zerbe as well as Frolich with his collaborators found that the solubility of methane in the same class of hydrocarbons decreases when the molecular weight increases; and also that methane is easily dissolved in light hydrocarbons of the paraffin series but to a smaller extent in aromatics. Tests show that the separation of oils into fractions by means of methane as a solvent is based on differences in the chemical structure and not, as in distillation, on physical properties.

According to Graham's theory gases dissolved in liquids become condensed, so that the solutions of gases can be considered as mixtures of more or less volatile liquids. Accepting this thesis, B. Neuhausen and W. Patrick in their work on gas solutions with special regard to the ammonia-water system, have come to the conclusion that the gas cannot be dissolved in a great quantity above its critical temperature in a liquid because its liquefaction is apparently impossible.

In the table are recorded the data obtained by various authors concerning the solubility of methane in light hydrocarbons.

**SOLUBILITY OF METHANE IN LIGHT HYDROCARBONS**

| Solvent— | Molar fractions of $CH_4$ in solution | Pressure in atm. | Temp. °F. |
|---|---|---|---|
| Propane | 0.574 | 95 | 68.0 |
| n-Pentane | 0.400 | 80 | 77.0 |
| Hexane | 0.414 | 80 | 77.0 |
| Octane | 0.441 | 80 | 77.0 |
| Benzene | 0.194 | 80 | 77.0 |
| Crude oil | 0.255 | 80 | 99.9 |
| Pentane | 0.1016 | 20.4 | 86.0 |
| Hexane | 0.1098 | 20.4 | 86.0 |
| Heptane | 0.0960 | 20.4 | 86.0 |
| Benzene | 0.0403 | 20.4 | 86.0 |
| Kerosene | 0.1152 | 20.4 | 86.0 |

Methane when dissolved probably becomes liquefied, regardless of the fact, that the phenomenon occurs above or below its critical temperature. It is well known that gases, dissolved below their critical temperature, evolve, besides the heat of mixing, also the heat of liquefaction.

References:

F. Fischer, C. Zerbe, Brennstoffchemie, 4, 17 (1923).

P. K. Frolich, E. J. Tauch, J. J. Hogan, A. A. Peer, Ind. Eng. Chem. 23, 548 (1931).

Th. Graham, Chemical and Physical Researches (Edinburgh 1876) p. 1.

B. S. Neuhausen, W. A. Patrick, Journ. Phys. Chem. 25, 493 (1921).

## Charcoal Method for Determining Gasoline Content of Natural Gas

**Will you please advise me where I might obtain the standard procedure for conducting the charcoal test on natural gas for gasoline content?—R. L. G.**

The details for determining the gasoline content of natural gas by the charcoal method were given on this page in issue of February 21, 1935.

# PERSONAL PARAGRAPHS

DAVID WISE, in the land department for Shell Petroleum Corporation at Houston, Tex., has been transferred to Wichita, Kans.

H. W. CAMP, general superintendent for the Empire Oil & Refining Company, with offices in Tulsa, is in Chicago this week.

O. W. KILLAM, independent operator, Laredo, Tex., is spending several weeks in Minnesota and Wisconsin on a vacation trip.

ELMER F. SCHMIDT, general superintendent of the Lone Star Gas Company, Dallas, Tex., has been made a director of that company.

G. R. PROUT, in charge of industrial sales for the Dallas, Tex., district of General Electric Company, returns to his office this week from vacation.

RAYMOND M. CARR, petroleum engineer, Sinclair Oil & Gas Company, Tulsa, spent his two-week vacation in Grove, Okla., returning to work on Monday.

FAIN GILLOCK, president of the Coast Petroleum Company, who has been in Houston, Tex., for several weeks watching the outcome of his company's wildcat test in Galveston County, is on a business trip to New York.

C. K. RICKEL, president of the Big Three Welding Company, Fort Worth, Tex., is in Cleveland, Ohio.

E. H. SALRIN, vice president of the Tide Water Oil Company at Houston, Tex., is on a business trip to New York.

L. H. SMITH, with the Associated Oil Company at Los Angeles, Calif., was a business visitor to Houston, Tex., the past week.

C. E. CURE, farm boss for Phillips Petroleum Company at Lost Springs, has had the McPherson, Kansas, Field added to his territory.

V. L. ABRAHAM, farm boss in the McPherson Field for Phillips Petroleum Company, has been transferred to the same position in Chase, Kans., area.

MR. and MRS. HAROLD BYRD have returned from a wedding trip to Honolulu. Mr. Byrd is a well-known independent operator of Dallas, Tex.

O. C. NEEDHAM, division superintendent in charge of the Panhandle and North Texas division for the Gulf Production Company, is on vacation with his family at points in Colorado.

J. F. BLAKE, general superintendent, Sinclair Prairie Pipe Line Company, Tulsa, left August 1 for a month's vacation in his old home in Bradford, Pa., and other oil centers of that region.

WILLIAM CURRIE, of the West India Oil Company, accompanied by MRS. CURRIE, arrived in New York City last week from Santiago, Chile. They will leave immediately on a trip to Europe.

DON RYAN, western Kansas scout for Stanolind Crude Oil Purchasing Company, has returned to Great Bend, Kans., after a two-week vacation.

TOM C. ERVIN, president of the Lucey Boiler & Manufacturing Company at Chattanooga, Tenn., is spending a few weeks in Houston, Tex., on business.

GEORGE C. MONTGOMERY, technician at the Shell Oil Company's Dominguez refinery, has been transferred to the Martinez refinery in a similar capacity.

J. M. CHARLTON, in charge of the land department for the California Oil Company at San Antonio, Tex., visited the company's offices at Dallas, Tex., the past week.

R. C. COLE, president of the Cole Petroleum Company, Laredo, Tex., is making a business trip to Chicago. On the trip he will include a visit through the Michigan fields.

HOWARD E. FELT, vice president and secretary of the Warren Petroleum Company, is back at his office in Tulsa with a heavy coat of tan acquired on the golf links at Chautauqua Lake, New York, where he spent most of a month's vacation.

CARL A. YOUNG, secretary of the Division of Production of the American Petroleum Institute, with headquarters in Dallas, Tex., is on vacation in Colorado.

JAMES McLAREN, land man and scout for the Phillips Petroleum Company with headquarters at Corpus Christi, Tex., was a business visitor to Houston, Tex., the past week.

W. E. ACKERMAN, of the Associated Oil Company, who recently underwent a serious operation at the St. Francis Hospital in San Francisco, Calif., is well on the road to recovery.

J. E. TUTTLE, general superintendent for the Humble Oil & Refining Company, Government Wells district, Southwest Texas, is on a motor trip to Carlsbad, N. Mex., and other western points. He is accompanied by his family.

R. S. STANFIELD has been placed in charge of the engineering department at the Bayonne, N. J., refinery of the Tide Water Oil Company. He succeeds EDWARD ELLSBERG who resigned effective July 1. Mr. Stanfield, for several years, was in charge of the Drumright, Okla., refinery of the Tidal Refining Company, a Mid-Continent subsidiary of the Tide Water Oil Company.

## Do You Remember?

From The Oil and Gas Journal Files

### 25 YEARS AGO

August 9, 1910

An effort is being made to organize a $10,000,000 refining company in the Pennsylvania fields to be made up entirely of oil producers. At the first meeting, in response to a circularized call for producers to meet in Pittsburgh, only 12 responded. Joseph A. Schofield of Warren presided at the meeting which was held behind closed doors.

J. E. Crosbie's "Sunny Jim," wins first money in one of the harness races at Grand Circuit meeting in Detroit, and Mr. Crosbie, J. F. Black, F. W. Young and George Davis, all Oklahoma oil operators, were there to witness it.

J. E. Connelly, one of the best known oil producers in the Lima Field, dies at his home in Cygnet, Ohio, age 54 years.

### 20 YEARS AGO

August 12, 1915

The Prairie Oil & Gas Co. raises Oklahoma - Kansas crude to 60 cents per barrel, a 5-cent advance. The Gulf and Texas companies met the advance.

The production of the Cushing Field is declining weekly and is down to 170,000 bbls. per day. Field operations have declined to 130 drilling wells. The Prairie Oil & Gas Co. and McMan Oil Co., each with 17,500 bbls. per day, are the leading producers. Forty-two million barrels of oil is stored in the field.

The Gulf Refining Co. has established an eight-hour day for all employes in its Port Arthur plants, with no cut in pay. The men formerly worked 9-hour or 12-hour shifts, according to the class of work done.

### 10 YEARS AGO

August 13, 1925

Herbert G. Wylie, president and general manager of the Pan American Petroleum & Transport Co., has resigned. He went to Mexico with E. L. Doheny 20 years ago and was largely responsible for the growth of the company.

The average price of oil in the Mid-Continent fields that are on a gravity basis is $2.04 per barrel.

Herbert P. Rhees, of Tulsa, assistant superintendent of production for the Prairie Oil & Gas Co., dies of typhoid fever in Denver, Colo.

DR. EVERETT P. PARTRIDGE has recently been appointed as director of research of Hall Laboratories, Inc.

S. G. OAKS, district superintendent, Sinclair Prairie Oil Company, Oklahoma City Field, is on a two weeks' vacation at Deer River, Minn., with his two sons.

A. R. O'BRIEN, production superintendent for Phillips Petroleum Company at Vernon, Tex., is spending several weeks visiting in Michigan and Pennsylvania.

R. S. MILLER, secretary to J. EDGAR PEW, executive vice president of the Sun Oil Company, is in the Dallas, Tex., offices of the company after a tanker trip from Philadelphia, Pa.

A. A. STEFFY, lease foreman for Phillips Petroleum Company in the Seminole Field, has been transferred to the properties of this company in the Fitts Field where drilling has been completed and the wells put on production.

G. D. GUNN, has been made assistant to J. P. STEPHENS, superintendent of the Oklahoma City, Lucien and Crescent Pools for Phillips Petroleum Company, and transferred from the Fitts Pool to Oklahoma City, Okla.

P. E. MAHAFFEY and family, Tulsa, are on vacation in Denver, Colo. Mr. Mahaffey is president of the Happy Belting Company. A. F. NIXON, vice president of the company, Fort Worth, Tex., is in Tulsa in Mr. Mahaffey's absence.

P. M. MISKELL, general manager of the refining and marketing departments of the Empire Oil & Re-

fining Company, Tulsa, last week visited the New York offices of the Cities Service Company. He also attended the meeting of the directors of the American Petroleum Institute.

LAWRENCE VANDER LECK, vice president of the Fullerton Oil Company, with which he has been connected for 15 years, has been elected chairman of the Central Committee of California Oil Producers, succeeding RALPH LLOYD, who recently resigned. Mr. Vander Leck, a graduate of the University of California and a former state oil and gas supervisor, was for several years a member of the Standard's geological department.

E. B. REESER, president of the Barnsdall Oil Corporation, Tulsa, was at the New York offices of the company last week.

ERNEST A. WETMORE, controller of Venezuela Gulf Oil Company, is convalescing after having spent several weeks in the hospital. Mr. Wetmore has to his credit many improvements in oil accounting practice and procedure.

W. S. BEICHNER and JOHN NELSON, lease foremen, have been moved from Phillips Petroleum Company properties in Oklahoma City, Okla., to Seminole, and H. GOODPASTER and FRED ZION have been promoted from positions of engineer and flowing crew foreman, respectively, to succeed Mr. Beichner and Mr. Nelson.

H. C. GEORGE, head of the department of petroleum engineering at the University of Pittsburgh, and R. E. HENRY, president of the Phoenix Oil Company, have been visiting oil fields in Wyoming and Montana during the past month. In August they will visit some of the major fields of Kansas, Oklahoma and Texas.

HOWARD BOYD, chief scout, and ROSS LEARD, in the engineering department, both of Dallas, Tex.; JOE L. JONES, in the land department, Oklahoma City, Okla., and JOE L. SIMPKINS, in the geophysical department, Houston, Tex., all with the Magnolia Petroleum Company, are making a two weeks' motor trip through western states on their vacation.

DR. ROBERT B. NEWCOMBE, assistant state geologist and member of the staff of the geological survey division of the Michigan State Department of Conservation since 1927, has resigned to enter private business as vice president of the Associated Petroleum Company, Detroit, effective September 1. He will be succeeded by GERALD E. EDDY, now of the Mount Pleasant, Mich., office of the oil and gas division.

VERNE HUME of the Imperial Oil, Ltd., staff at Toronto, is spending his holidays at Petrolia, Ontario.

S. S. REESMAN, oil operator, of Tulsa, is spending the summer on Lake Erie, near Chatham, Ontario.

RALPH W. CARROLL, retired pioneer supply man, who has spent most of his time in travel in recent years, writes from the Elks Club, 3, in San Francisco, that he expects to be there for some weeks, after which he will move on to Los Angeles and perhaps San Diego.

R. E. HAVENSTRITE, president of the Havenstrite Drilling Company, and a prominent California oil producer, was elected vice president of the Los Angeles Fire Commission for the ensuing year ending June 30, 1936.

JOHN B. FINK, petroleum engineer of Tulsa, is back from Oil City, Pa., where his mother, MRS. MARY JANE FINK, died recently. Her husbank, the later JOHN J. B. FINK, was a pioneer operator in early Pennsylvania fields, including Pithole and Bradford. Besides her son, Mrs. Fink leaves a daughter, MRS. HARRY B. SNAMAN, of Oil City.

## In Mexico for Socony-Vacuum

Paul E. Haralson, formerly land man for the Magnolia Petroleum Company and now in charge of the New England Company of Maine and Atzlan Investment Company, subsidiaries of Socony-Vacuum in Mexico, was born in Bastrop, Tex., 39 years ago. He grew up in that town and after graduating from high school matriculated at the University of Texas in Austin. He studied law at the university, but did not follow that profession.

PAUL E. HARALSON

When the United States entered the World War Paul went to an officers' training camp and was commissioned a lieutenant. He saw front-line action in France and was promoted to captain.

Upon being mustered out of service Mr. Haralson started with Magnolia, a Socony-Vacuum subsidiary, as a roustabout in the Burkburnett Field in 1919. He worked in the production department until 1926, when he was transferred to the clerical department, soon becoming chief clerk of the Oklahoma producing department in Oklahoma City. He was moved to the leasing department and then to the land department at Wewoka, Okla. Other shifts followed and he was in Shreveport, La., when the East Texas excitement resulted in his being transferred to Longview. He was kept busy in leasing work till March, 1934, when he was transferred to the main office of the company in Dallas, Tex., and made assistant to Ralph Talley.

In October, 1934, Mr. Haralson went back to Bastrop and married Miss Una Craft. In December of that year he was chosen by Socony-Vacuum to take charge of the operations of the New England Company of Maine and the Atzlan Investment Company. His headquarters since have been in Tampico. When he has time for diversion he likes tennis, and he plays a good game.

MR. and MRS. F. D. BOSTAPH, Fort Worth, Tex., are on vacation in New Mexico, making the trip by automobile. Mr. Bostaph is sales manager in charge of lubrication and tank car sales for the Texas Pacific Coal & Oil Company.

FREDERICK G. CLAPP, who has been conducting geological studies in the West Indies, has returned to the United States and is dividing his time during the summer between his New York office and his vacation home in Duxbury, Mass.

B. L. MAJEWSKI, vice president of Deep Rock Oil Corporation, Chicago, has been appointed by MAYOR KELLY of Chicago as 1 of 10 commissioners for the permanent Chicago fair on Northerly Island, site of the 1933 and 1934 World's Fair on the lake front. His term runs for five years.

MISS KATE FRIERSON, secretary to E. R. BROWN, chairman of the board, and MISS KATHLEEN BULLOCK, secretary to M. J. McLAUGHLIN, vice president and general manager of production, Magnolia Petroleum Company, have returned from a vacation in Alaska and the northwestern states.

ROY L. TRIBBEY, Gladewater, Tex., production superintendent and the chief production clerk, JOHN M. RUSSELL, both with the Magnolia Petroleum Company, have been transferred from their East Texas headquarters to Sinton in Southwest Texas where the company has opened a South Texas Gulf Coast production division.

GEORGE IVEY, chairman of the board of the Kern River Oilfields, Ltd., of California, has just completed a trip to this country from London, England, during which he visited the properties of the company on the Pacific Coast. He was accompanied by R. H. YOUNG, a director of the company. They will sail from New York for London within a few days.

ROY J. TRIBBY, with the Magnolia Petroleum Company, formerly at Longview, Tex., has been transferred to the Sinton district in Southwest Texas where he will be in charge of field operations for the company.

EARL GIFFIN, formerly district foreman for the East Kansas district of Phillips Petroleum Company, has been transferred to Midland, Tex., in charge of West Texas and New Mexico, succeeding L. B. HOLLAND resigned to engage in consulting engineering. M. L. ATKINSON, formerly technical assistant to the superintendent at Seminole, Okla., has been made district foreman for the East Kansas district, with headquarters in Wichita, Kans. L. R. LACY has been made assistant superintendent in Seminole and transferred from West Kansas.

C. D. WATSON, director of engineering, Carter Oil Company, Tulsa, returned from Washington, D. C., last week and left in a day or two for his vacation to be spent in Minnesota.

CHARLES McMAHON of Tulsa, prominent producer in Oklahoma and Texas, together with MRS. McMAHON, and MRS. JOHN R. LAVENS of Bradford, Mr. McMahon's sister, sailed from Montreal for an European trip.

H. P. GRIMM, president of the Pacific Western Oil Company, and for a time state oil umpire, has been elected a member of the executive committee of the California curtailment committee. Other members of the executive committee include NEAL ANDERSON, WILLIAM REINHARDT and LLOYD WILLIAMSON.

ROBERT McMULLEN and HARRY WOODS of the Gas Producers Syndicate of Detroit, Mich., recently inspected the company's wells on the Pardo lease in the DeClute Field, Kent County, Ontario.

E. G. DAHLGREN, chief clerk, Conservation Department, Oklahoma Corporation Commission, Oklahoma City, Okla., with family left Friday for a vacation in Wisconsin. Mr. Dahlgren returns in two weeks leaving the family to come back later.

DAVE SNAKARD, for many years connected with the Texas Company's land department, and a member of a family well known in the oil industry since the early days of the Titusville Field in Pennsylvania, is ill in a Wichita, Kans., hospital. The latest report on his condition gives it as greatly improved.

# Natural Gasoline Climbing in Group 3 With Kerosene Unusually Strong

*By T. F. SMILEY*

Notwithstanding the dominating position which gasoline occupies among refined oil products and the further fact that it shows no sign of slackening the rollicking pace at which it has been traveling in the Group 3 market, two of its associates in the list of petroleum derivatives were this week the particular subject of comment. These two were natural gasoline and kerosene.

Natural gasoline, increasingly restive, broke away from the price levels to which it had been anchored since mid-June and began exploring higher altitudes. Demand was following so closely upon the heels of production that stocks at the plants of manufacturers were reported to be virtually nil. All grades jumped a quarter-cent, with prospects of going higher. Buyers on Tuesday of this week were reported to have been trying to get 15 or 20 cars of 26-70 at 3⅜ cents without finding any offerings at that figure.

### Contributing to Buoyancy

Various conditions contributed to the heightened buoyancy of the naturals. Of special import was the curtailment of output in the Texas Panhandle in obedience to the state's new gas conservation law which went into effect August 1. The stream of natural gasoline from that area is estimated to have been cut 260,000 gallons daily, with further reduction to come October 1, when sour gas as well as sweet will come within the operation of the conservation law.

Then too the vigorous demand for refinery gasoline is carried over of course into the natural division. While the requirements from this source are chiefly for the 26-70 grade, the stabilized material is getting a play too, for it is able to swing into actual competition with the refined product. The quantity of stabilized material available was reported to be small, however.

Scarcity of kerosene created strength in that material regarded as remarkable for this time of year. Stocks in the Mid-Continent were declared to be lower than they had been at any previous time in the last 10 years. Depleted inventories were attributed largely to the fact that East Texas kerosene, formerly sent into northern markets, has been going to the Gulf, mostly for coastwise movement. With this taken off the northern market Mid-Continent refiners, who had reduced their kerosene cut to conform with the low summer demand, have found themselves hard pressed to fill even the moderate requirements of the season. Prices advanced under the spur of this scarcity.

The conditions affecting kerosene extended in great degree to the other light gravity burning oils, which underwent an upward revision in price.

Gasoline consumption had reached such a point this week, with the movement of tourists at high tide, that there was a resumption of talk that tank car prices might go up another notch before the peak of the consuming season had been passed. Predictions were made last spring that June would see 5 cents being paid for low octane material. But a long train of troubles came after that, interfering with motor travel and in many cases bringing it to a standstill in flooded areas; so that although the gasoline market gained ground steadily after the first of March, it was continuously under one handicap or another until July, when sunny skies appeared. Then the family car, which had been standing morosely in the garage, was brought out. Delayed vacation trips began.

The last few weeks have seen the main highways filled with motorists. Jobber buying of motor fuel, which had fallen to a low ebb, grew rapidly in volume. The steadily increasing stream of jobber orders, in addition to regular contract shipments, has drawn heavily on refiners' stocks, and some storage tanks now have bottoms thinly covered. If there could have been any chance of surplus supplies accumulating in threatening volume in the Mid-Continent territory, that slender possibility has been prevented by inter-refinery buying.

### Feeling of Confidence Grows

Both the new marketing code about to be submitted to the industry through regional meetings and the oil bills introduced in the House and the Senate in Washington this week tended to increase the feeling of confidence which has been spreading throughout the trade. The excellent July business in gasoline is expected to be exceeded in August. Consumption, soundest of market factors, has provided the foundation upon which the splendid summer business for 1935 in the Mid-Continent has been built. The new code and the prospect of congressional action which will enable the oil industry to plan for the future without the threat of governmental interference were looked upon as likely to provide the stabilizing machinery that may be needed after the period of high consumption ends.

### Refined Oil Market Barometer

Indications point to heaviest summer gasoline consumption on record. Renewed confidence manifested as result of proposed new oil legislation in Washington containing no provision for government control of industry. General attitude toward new marketing code is friendly and belief is expressed that when adopted it will serve as a valuable stabilizing agency.

MID-CONTINENT. Gasoline firm. Natural strong. Kerosene and distillates scarce.

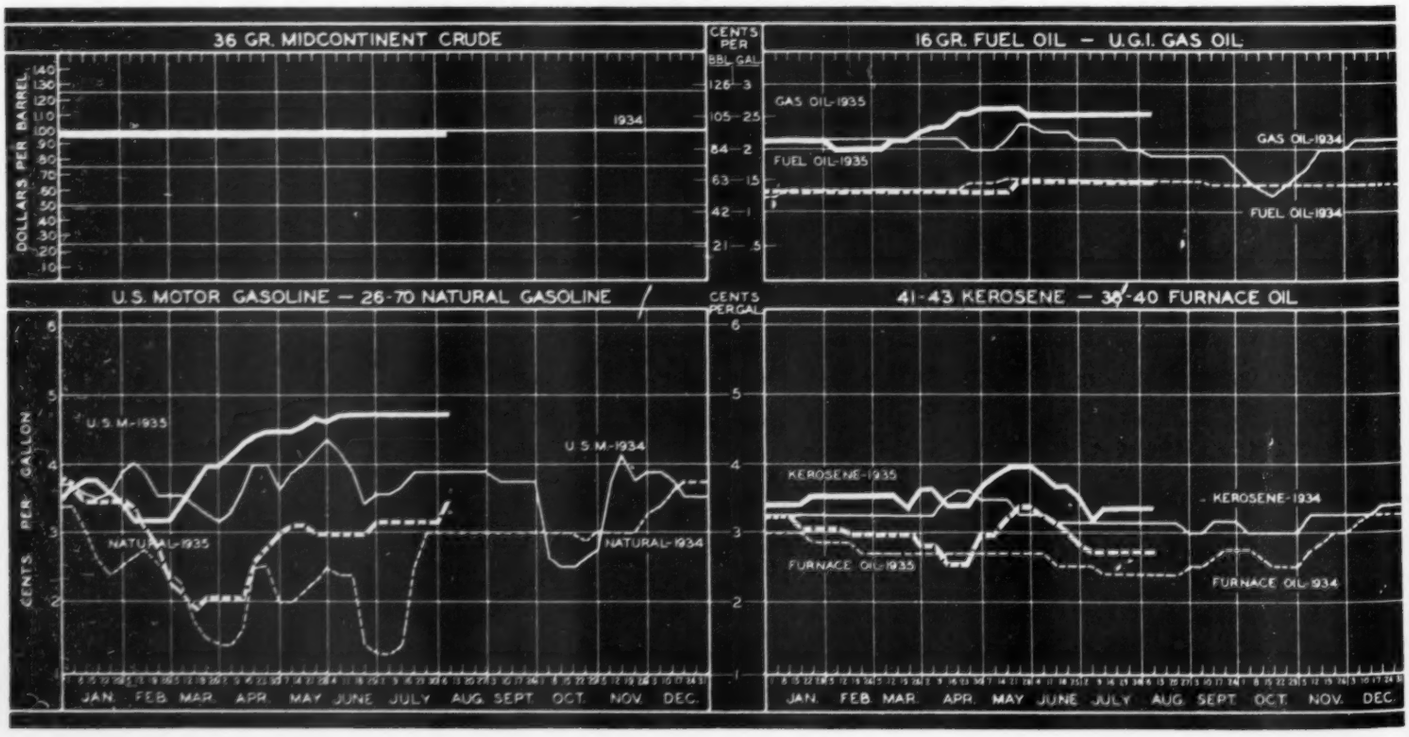
EAST COAST. Market generally featureless, but gasoline consumption may break record.

GULF COAST. Gasoline strong. Market dull, with no price changes.

PENNSYLVANIA. Fuel oil up. Neutrals stronger. Rest of the market listless.

CALIFORNIA. Gasoline consumption at peak, but overproduction keeps prices down.

CHICAGO. Gasoline demand heavy, prices firm. Burning oils in better tone.



# Eastern Refined Market Is Featureless Though Gasoline Shipments High

## By C. O. WILLSON

NEW YORK, Aug. 5.—Eastern refined markets were featureless during the past week so far as changes in prices or demand for products were concerned. The refinery list does not have an important product which buyers and sellers will agree is strong. At the same time prices are holding with some indications the market on kerosene and furnace oils will shortly show strength.

In the case of gasoline, available data show shipments from refineries are heavy with predictions August will witness the largest movement to domestic consumers in the history of the industry in this territory. The export demand continues slow with little activity in inquiries for spot shipments at the Gulf.

In regard to gasoline there is some uneasiness as to possible developments on the weak side before the end of the month. While domestic demand is heavy, supplies are at least adequate and according to some there is gasoline in storage along the Atlantic Seaboard, Gulf Coast and also California which the owners are anxious to move and which will be in a distress class if buyers are not found in the near future. At present, so far as known, this gasoline is being quoted at the general market levels or within one-eighth cent of those levels. What happens to this gasoline, according to those familiar with conditions, will depend largely on developments in the Mid-Continent crude situation in the next 30 days, especially in Texas. Should crude production be curtailed materially as many predict with an assurance of further restrictions if necessary during the fall, there will be markets for the gasoline at prevailing prices. Otherwise, it is concluded, the sellers are apt to give whatever concessions they deem necessary to reduce their storage during the summer.

It is often contended that gasoline inventories are not excessive in this territory and the entire United States, pointing out stocks are in line with a program which took into consideration seasonal conditions and minimum working requirements. The weakness of this argument has been demonstrated many times. The controlling factor in the gasoline market over a period of several months is the crude situation. Gasoline stocks, normal when the crude situation is satisfactory, can suddenly become excessive in the hands of a few companies when the industry is faced with an oversupply of raw material.

Another situation on which opinions differ has to do with the margins allowed jobbers and dealers. Recently dealer margins were widened in the metropolitan area and several other points. At this time dealer margins on undivided accounts is 4.75 cents in metropolitan New York and one-half cent less on the divided accounts. At several points the margins are 4½ cents on the undivided and 4 cents on the divided accounts. These represent one-half cent increases from the spreads earlier in the year. Jobbers and buyers in metropolitan New York buying on a tank car or small barge spot basis, have a differential under the net retail price of from 7 to 8 cents a gallon depending on the grade purchased. The tank car prices on regular grade gasoline containing Ethyl fluid is 6½ cents and 6¼ cents in barges. The net retail prices in the greater part of New York City is 14.3 cents or a spread of 7.8 to 8.05 cents per gallon.

It is said the spread in the case of the dealers has been widened to prevent price cutting in the retail end. In some cases dealers were threatening to drop the branded grades of the major companies and take on the products of jobbers, unless their spreads were widened. The jobbers buying on the open market have had plenty of margin in recent weeks to give dealers wider differentials.

The theory that the way to avert price wars is to widen spreads for all classes of marketing outlets is at least open to argument and has been condemned by some in this territory including sales managers whose companies have gone along in the general action taken by the major concerns. They take the position wide margins are a cause and not a remedy for marketing troubles.

They point to conditions last year claiming wide margins to jobbers passed on to dealers caused the disastrous price wars of last fall that required months to straighten out at many points. It was felt at that time the marketing end should gradually work toward a return to the narrower spreads of a few years ago and away from the wide margins and their tie-in with price cutting practices. It was suggested 6 cents was sufficient to cover efficient jobber operations with 4 cents to the dealer in exclusive dealer arrangements with one-half cent less on divided accounts. Some progress was made in establishing this basis for operations in this and other sections.

These narrower margins were not intended to drive jobbers and dealers out of business as charged in Washington and other points recently. Most large companies sell the bulk of their gasoline through jobber and dealer accounts and in general it is a more satisfactory method of operation as regards cost than when the company carries on the tank wagon and service station operations under its own direct ownership and management. The thought back of the narrower margins is it will weed out the uneconomic jobber and dealer units which require exceptionally wide margins on which to operate. The remainder benefit with increased volume of business which will more than offset the decreases in margins and the industry will be freed of the constant problem of price cutting in retail sales. The consumer will benefit by reduction in marketing costs.

Some feel the basic cure for marketing margins lies in the spread between tank car and retail gasoline prices. In this recent development of giving wider spreads to dealers to prevent independent jobbers from obtaining the accounts, it often happens the source of supply for the jobber is the company which is trying to protect its dealer business. In other words the refiner operator sells the jobber at a price which permits the latter to take away the former's own bulk station and dealer business.

### Gasoline Sales

The following table shows the May gasoline consumption in this territory based on gasoline tax reports as released by the A.P.I. (data in gallons):

| | May | | 1935 gain |
|---|---|---|---|
| | 1935 | 1934 | per cent |
| Connecticut | 24,363,000 | 23,263,000 | 4.7 |
| Delaware | 4,130,000 | 3,772,000 | 9.5 |
| Maine | 10,863,000 | 11,164,000 | *2.7 |
| Maryland | 19,100,000 | 18,797,000 | 1.6 |
| Massachusetts | 54,925,000 | 54,255,000 | 1.2 |
| New Hampshire | 6,523,000 | 6,473,000 | .8 |
| New Jersey | 65,417,000 | 68,062,000 | *3.8 |
| New York | 140,743,000 | 144,473,000 | *2.5 |
| Pennsylvania | 108,501,000 | 104,316,000 | 4.0 |
| Vermont | 4,543,000 | 4,437,000 | 2.4 |
| Total | 439,108,000 | 439,012,000 | .02 |

*Decrease.

### Prices

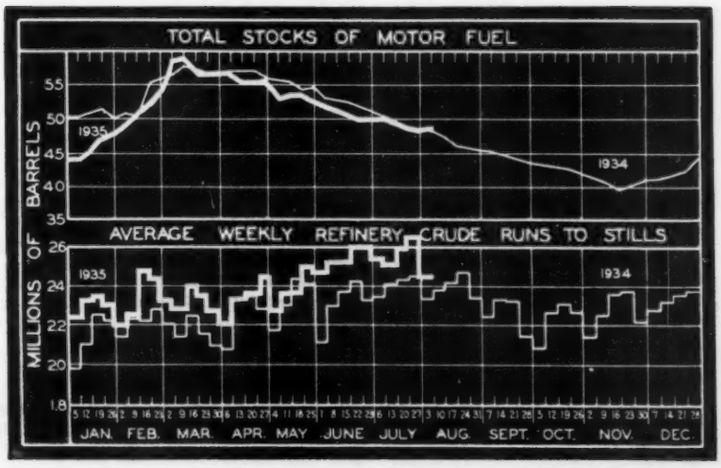
Prices on export gasoline at the Gulf are fractionally lower. The 64-66 375 endpoint is quoted over a price range of 5⅛ to 5¼ cents. Domestic prices on gasoline in New York Harbor are unchanged ranging from 5¾ cents for low octane white grade to 6¼ cents for ethylized regular.

No important changes in other products were apparent during the week.

## American Petroleum Institute Weekly Refinery Statistics

**Week Ending August 3, 1935**

| | Capacity reporting per cent | Daily crude runs (bbls.) | Finished motor fuel (bbls.) | Gas oil and fuel oil (bbls.) |
|---|---|---|---|---|
| East Coast | 100.0 | 468,000 | 15,297,000 | 12,523,000 |
| Appalachian | 94.8 | 86,000 | 2,110,000 | 825,000 |
| Ind., Ill., Ky. | 95.9 | 358,000 | 9,074,000 | 5,128,000 |
| Okla., Kans., Mo. | 84.8 | 260,000 | 4,971,000 | 4,770,000 |
| Inland Texas | 48.5 | 77,000 | 1,050,000 | 1,720,000 |
| Texas Gulf | 96.4 | 544,000 | 4,976,000 | 11,409,000 |
| Louisiana Gulf | 96.4 | 106,000 | 1,141,000 | 4,038,000 |
| N. La. and Ark. | 90.0 | 33,000 | 237,000 | 375,000 |
| Rocky Mountain | 61.9 | 44,000 | 713,000 | 783,000 |
| California | 92.6 | 491,000 | 8,688,000 | 64,572,000 |
| Total United States.. | 89.5 | 2,467,000 | 48,257,000 | 106,143,000 |



# Market Record of Active Oil Stocks Listed on New York Stock Exchange

Compiled by Carl H. Pforzheimer Co., 25 Broad Street, New York City. Members New York Stock Exchange and New York Curb Exchange

| 1935 High | 1935 Low | Week ended August 3 Sales | High | Low | Close | Stocks— | Total shares outstanding | Par value | Dividend rate | Payable or last paid | Dividends paid in 1934 | 1934 High | 1934 Low | 1933 High | 1933 Low |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70¾ | 48½ | 4,700 | 69 | 61⅞ | 68¼ | Amerada Corp. | 788,675 | N.P. | 50cQ | 7-31-35 | $2.00 | 55⅝ | 39 | 47⅝ | 18½ |
| 28 | 21⅜ | 13,800 | 24⅛ | 23 | 24⅛ | Atlantic Refining | 2,664,904 | $25 | 25cQ | 6-15-35 | 1.00 | 35¼ | 21½ | 32½ | 12⅜ |
| 10⅝ | 5⅞ | 14,500 | 8¾ | 8¼ | 8⅜ | Barnsdall Corp. A | 2,195,397 | $5 | .... | 5-11-31 | .... | 10 | 5⅞ | 11 | 3 |
| 9¾ | 3⅜ | 146,500 | 9¾ | 7⅜ | 9¾ | Columbia Gas & Elec. | 11,610,036 | N.P. | .... | 5-15-34 | ‡ .25 | 19¼ | 6⅝ | 28⅛ | 9 |
| 10½ | 6½ | 61,300 | 8⅝ | 7¾ | 8⅝ | Consolidated Oil Corp. | 13,996,072 | N.P. | 14c | 10-31-34 | .42 | 14¼ | 7¼ | 15¾ | 5 |
| 23 | 15⅛ | 20,600 | 21½ | 19¾ | 20½ | Continental Oil of Delaware | 4,682,722 | $5 | 12½c | 4-30-35 | .50 | 22¾ | 15¾ | 19⅝ | 4⅞ |
| 20⅝ | 11¾ | 33,400 | 20⅝ | 17⅞ | 19⅜ | General Asphalt | 387,149 | $10 | .... | 6-15-32 | .... | 23½ | 12 | 27 | 4⅜ |
| 3⅜ | 1½ | 4,700 | 2¾ | 2¼ | 2¾ | Houston Oil (new) | 1,098,618 | $25 | .... | 10-17-30 | .... | 5⅝ | 2½ | 7⅜ | 1⅜ |
| 1⅞ | ¾ | 1,200 | ½ | ⅜ | ¾ | Louisiana Oil Refining | 1,302,158 | N.P. | .... | ..... | .... | 3⅜ | ¾ | 4 | ⅝ |
| 13⅞ | 9½ | 11,700 | 10¾ | 10⅛ | 10¾ | Mid-Continent Petroleum | 1,857,912 | $10 | 15c | 5-15-35 | .50 | 14¾ | 9⅛ | 16 | 3¾ |
| 19 | 9 | 2,600 | 16⅞ | 16 | 16¼ | National Supply of Delaware | 382,591 | $25 | .... | 5-15-31 | .... | 21⅛ | 10 | 28⅝ | 4 |
| 14⅛ | 9⅛ | 14,500 | 11½ | 10¾ | 11⅛ | Ohio Oil Co. | 6,563,377 | N.P. | 15c | 6-15-35 | .45 | 15⅞ | 8½ | 17⅝ | 4¾ |
| 9½ | 7 | 3,300 | 8 | 8 | 7⅞ | Pacific Western Oil | 1,000,000 | N.P. | 40c | 11-30-34 | .40 | 9⅝ | 5½ | 9½ | 3 |
| 1⅜ | ⅝ | 1,800 | 1 | ⅝ | ¾ | Panhandle P. & R. | 198,770 | N.P. | .... | ..... | .... | 2½ | ⅝ | 4¼ | ⅜ |
| 23 | 13¾ | 49,400 | 21⅝ | 20 | 21½ | Phillips Petroleum | 4,154,687 | N.P. | 25c | 8-30-35 | 1.00 | 20¾ | 13⅜ | 18¾ | 4¾ |
| 11⅝ | 6½ | 4,900 | 9½ | 8⅝ | 9 | Plymouth Oil Co. | 1,050,000 | $5 | 25c | 3-30-35 | 75c & 4% Stk. | 16¾ | 7¼ | 17⅝ | 6¾ |
| 9¼ | 5⅞ | 19,400 | 9¼ | 8⅝ | 9⅛ | Pure Oil Co. | 3,038,370 | N.P. | .... | 9-1-30 | .... | 14⅞ | 6⅛ | 15⅜ | 2½ |
| 43¼ | 29½ | 800 | 42½ | 41¾ | 42½ | Royal Dutch N. Y. shares | fl. 503,642,000 | fl. 100 | $1.70 | 8-1-35 | 1.35 | 39¼ | 28⅝ | 39¾ | 17⅝ |
| 35⅞ | 20¾ | 5,100 | 30½ | 28¼ | 29¾ | Seaboard Oil of Delaware | 1,244,283 | N.P. | 15cQ† | 9-15-35 | 1.00 | 38⅜ | 20¾ | 43⅜ | 15 |
| 11½ | 4½ | 31,900 | 11⅛ | 10⅜ | 11 | Shell Union Oil | 13,070,625 | N.P. | .... | 6-30-30 | .... | 11½ | 6 | 11⅝ | 4 |
| 97⅜ | 63¼ | 1,100 | 97⅜ | 94⅜ | 97⅜ | Shell Union Oil pfd. | 400,000 | $100 | .... | 7-1-31 | .... | 89 | 57 | 61 | 28½ |
| 18⅜ | 5 | 6,700 | 6 | 5⅜ | 5⅞ | Simms Petroleum | 461,698 | $10 | $10 liq. | 7-5-35 | .55 | 17⅛ | 7¼ | 12⅜ | 4⅛ |
| 11⅜ | 6½ | 1,700 | 10⅛ | 9⅞ | 10⅛ | Skelly Oil | 1,008,514 | $25 | .... | 12-15-30 | .... | 11½ | 6 | 9⅞ | 3 |
| 15¾ | 11 | 40,100 | 13½ | 12⅝ | 13⅜ | Socony-Vacuum | 31,154,379 | $25 | 15cQ | 3-15-35 | .60 | 19⅞ | 12½ | 17 | 6 |
| 38⅞ | 27¾ | 23,900 | 34¼ | 32¾ | 34¼ | Standard Oil of California | 13,102,900 | N.P. | 25c | 9-18-35 | 1.00 | 42⅞ | 26½ | 45 | 19½ |
| 27¼ | 23 | 17,400 | 26¼ | 25⅝ | 26¼ | Standard Oil (Indiana) | 15,215,677 | $25 | 25cQ | 6-15-35 | 1.00 | 32¾ | 23¼ | 34 | 17 |
| 32 | 25½ | 100 | 25½ | 25½ | 25½ | Standard Oil of Kansas | 200,000 | $10 | 50cQ | 10-31-34 | 2.00 | 41 | 26 | 39⅞ | 12¾ |
| 50½ | 35¾ | 25,600 | 47½ | 46 | 47⅛ | Standard Oil of New Jersey | 25,856,081 | $25 | 50cSA‖ | 6-15-35 | 1.25 | 50⅛ | 39¼ | 47½ | 22¾ |
| 75½ | 60½ | 1,300 | 70 | 66½ | 66½ | Sun Oil | 1,733,013 | N.P. | 25cQ | 9-16-35 | $1 & 9% Stk. | 74¼ | 51½ | 59 | 35 |
| 23¾ | 16½ | 39,100 | 20 | 18⅝ | 20 | Texas Corp. | 9,486,417 | $25 | 25cQ | 7-1-35 | 1.00 | 29⅝ | 19⅝ | 30½ | 10⅝ |
| 6⅜ | 3¼ | 6,800 | 6 | 5¾ | 5⅞ | Texas Pacific Coal & Oil | 880,703 | $10 | .... | 12-31-29 | .... | 6½ | 2½ | 6½ | 1⅝ |
| 12 | 7⅝ | 34,500 | 10¾ | 9½ | 10¼ | Tide Water Associated | 5,631,341 | N.P. | .... | 2-16-31 | .... | 14⅜ | 8 | 11⅝ | 3¼ |
| 102⅛ | 84 | 3,000 | 100 | 99½ | 100 | Tide Water Associated pfd. | 666,524 | $100 | $3§ | 7-1-35 | §8.50 | 87 | 64½ | 65¼ | 23½ |
| 20½ | 14¾ | 7,700 | 17⅞ | 17⅛ | 17⅝ | Union Oil of California | 4,386,070 | $25 | 25cQ | 5-10-35 | 1.00 | 20½ | 11½ | 23¾ | 8½ |
| 26½ | 20⅞ | 1,100 | 25 | 23⅝ | 24½ | Union Tank Car Co. | 1,200,000 | N.P. | 30cQ | 6-1-35 | 1.20 | 25¾ | 15⅝ | 22¾ | 10½ |
| 2⅝ | 1 | 1,100 | 2⅛ | 2⅛ | 2⅛ | Wilcox Oil & Gas | 424,839 | $5 | .... | 5-10-28 | .... | 5¾ | 2 | 5½ | 2 |

*Ex-dividend. †Plus extras. ‡Payable in preferred stock. §On account of accumulated and current dividends. ‖Dividend 4/75 Mission Corp. paid 3-15-35. ¶Dividend of one-half share Barnsdall Refining Corp

# Market Record of Active Oil Stocks Listed on New York Curb

Compiled by Carl H. Pforzheimer Co., 25 Broad Street, New York City. Members New York Stock Exchange and New York Curb Exchange

| 1935 High | 1935 Low | Week ended August 3 Sales | High | Low | Close | Stocks— | Total shares outstanding | Par value | Dividend rate | Payable or last paid | Dividends paid in 1934 | 1934 High | 1934 Low | 1933 High | 1933 Low |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41 | 30½ | 100 | 41 | 40¼ | 41 | Buckeye Pipe Line Co. | 200,000 | $50 | 75cQ | 6-15-35 | $3.00 | 38 | 26 | 39¾ | 25 |
| 4¼ | 1⅝ | 3,800 | 2⅝ | 2⅜ | 2½ | Carib Syndicate | 799,020 | 25c | .... | ..... | .... | 5½ | 1½ | 7¾ | ⅛ |
| 157 | 115 | 200 | 140 | 138 | 140 | Chesebrough Mfg. Co. | 120,000 | $25 | $1Q† | 6-28-35 | 11.50 | 150 | 116 | 129 | 71 |
| 2¼ | ⅝ | 21,200 | 1⅞ | 1⅝ | 1⅞ | Cities Service | 37,804,394 | N.P. | .... | 6-1-32 | .... | 4¼ | 1¼ | 6¼ | 1½ |
| 1¼ | ½ | 1,800 | 1 | 1 | 1 | Colon Oil | 2,200,000 | N.P. | .... | ..... | .... | 3¼ | ½ | 4 | ¼ |
| ⅞ | ¼ | 200 | ⅞ | ¼ | ¼ | Cosden Oil | 399,687 | $1 | .... | ..... | .... | 3⅞ | ½ | 3⅞ | 1⅜ |
| 18⅞ | 10 | 10,100 | 17½ | 16 | 17 | Creole Petroleum | 6,974,356 | $5 | .... | ..... | .... | 14⅜ | 9⅝ | 12 | 4⅜ |
| 6⅝ | 4¼ | 400 | 5½ | 5 | 5½ | Darby Petroleum | 500,696 | $5 | 25c | 7-15-35 | .50 | 7½ | 4¼ | 8 | 2⅛ |
| 2 | ¾ | No sales .. | .. | .. | .. | Derby Oil & Refining | 263,162 | N.P. | .... | ..... | .... | 2¼ | 1 | 2¾ | ⅞ |
| 38 | 34 | No sales .. | .. | .. | .. | Eureka Pipe Line | 50,000 | $50 | $1Q | 8-1-35 | 4.00 | 37 | 30 | 41¾ | 20 |
| 74¾ | 50¼ | 5,500 | 63¾ | 60¾ | 62½ | Gulf Oil Corp. | 4,538,101 | $25 | .... | 10-1-31 | .... | 76¾ | 49¾ | 62 | 24 |
| 64 | 44 | 8,300 | 61 | 56 | 59 | Humble Oil & Refining (new) | 8,923,935 | N.P. | 25cQ | 7-1-35 | $1.25 | 49½ | 33¼ | 105½ | 40 |
| 22½ | 15⅝ | 9,000 | 19⅝ | 19⅛ | 19¼ | Imperial Oil of Canada | 26,919,871 | N.P. | 25cSA†‡ | 6-1-35 | .92½ | 17⅞ | 12⅝ | 15⅞ | 6½ |
| 6 | 3⅝ | 100 | 5¼ | 5¼ | 5⅛ | Indiana Pipe Line | 300,000 | $10 | 15cSA | 5-15-35 | .35 | 6⅞ | 3⅝ | 8 | 3⅛ |
| 30¾ | 28 | 6,200 | 34⅞ | 33¼ | 34⅜ | International Petroleum | 14,247,088 | N.P. | 75cSA†‡ | 6-1-35 | 2.28 | 33⅜ | 19⅜ | 23½ | 8⅞ |
| 9½ | 4⅜ | 8,600 | 7¾ | 7⅜ | 7⅝ | Louisiana Land & Exp. | 3,000,000 | N.P. | .... | ..... | .... | 5 | 2¼ | 2¼ | ⅜ |
| 6¾ | 3½ | No sales .. | .. | .. | .. | Lion Oil Refining | 270,000 | N.P. | .... | 10-27-30 | .... | 6 | 3⅜ | 9½ | 1¼ |
| 7½ | 4½ | 9,600 | 7½ | 6½ | 7½ | Lone Star Gas | 5,382,723 | N.P. | 15c | 8-15-35 | ‖ .16 | 8⅜ | 4¼ | 11⅞ | 4⅜ |
| 5½ | 4¼ | 3,800 | 5¼ | 5 | 5¼ | Mountain Producers | 1,682,182 | $10 | 15cQ | 7-1-35 | .60 | 5½ | 4 | 6½ | 2½ |
| 18¾ | 11¾ | 2,300 | 18¾ | 18⅛ | 18½ | National Fuel Gas | 3,810,183 | N.P. | 25cQ | 7-15-35 | 1.00 | 18⅛ | 13⅛ | 20 | 10 |
| 10½ | 6⅜ | 700 | 10¼ | 9⅞ | 9⅞ | National Transit | 500,000 | $12.50 | 40cSA | 6-15-35 | .75 | 9½ | 7 | 10 | 5½ |
| 2½ | 2 | 300 | 2½ | 2⅜ | 2⅜ | New Bradford Oil | 1,445,202 | $5 | 10cSA | 3-15-35 | .20 | 2½ | 1¾ | 2⅛ | ⅛ |
| 2⅛ | 1 | 1,200 | 2 | 1¾ | 2 | New Mexico and Arizona | 1,000,000 | $1 | .... | ..... | .... | 2¾ | 1 | 1⅞ | ⅛ |
| 4 | 3 | 200 | 4 | 4 | 4 | New York Transit | 100,000 | $5 | 15cSA | 4-15-35 | .30 | 4¾ | 3 | 4⅞ | 3 |
| 7 | 5¼ | 100 | 6 | 6 | 6 | Northern Pipe Line | 120,000 | $10 | 25cSA | 7-1-35 | .50 | 7 | 4⅝ | 6⅛ | 4¼ |
| 2⅛ | 1¾ | 9,500 | 2 | 1¾ | 2 | Pantepec Oil | 1,608,700 | N.P. | .... | ..... | .... | 2⅝ | ⅞ | 3¾ | ⅛ |
| 1½ | ⅝ | 800 | 1⅛ | ⅞ | 1⅛ | Ryan Consolidated | 296,931 | N.P. | .... | ..... | .... | 3⅜ | ⅞ | 4¼ | ⅝ |
| 7½ | 5¼ | 1,200 | 7¼ | 7 | 7 | Salt Creek Producers | 1,496,859 | $10 | 20cQ | 8-1-35 | .80 | 7⅞ | 5½ | 9¼ | 3½ |
| 28¾ | 21⅝ | 3,000 | 24 | 22⅝ | 23½ | South Penn Oil | 1,200,000 | $25 | 30cQ | 6-20-35 | 1.20 | 26½ | 17½ | 22⅛ | 11 |
| 4⅝ | 3⅞ | 200 | 4¼ | 4¼ | 4¼ | Southern Pipe Line | 100,000 | $10 | 15cSA | 9-3-35 | .25 | 5½ | 3½ | 6 | 2⅛ |
| 52½ | 45¼ | No sales .. | .. | .. | .. | Southwest Penna. Pipe Lines | 35,000 | $50 | $1Q | 7-1-35 | 5.00 | 47 | 41 | 43 | 24½ |
| 21⅝ | 18 | 3,600 | 21 | 20¼ | 20½ | Standard Oil of Kentucky | 2,004,790 | $10 | 25cQ† | 3-15-35 | 1.50 | 18⅜ | 14⅝ | 19¼ | 8⅜ |
| 12 | 7¾ | 100 | 9⅞ | 9⅞ | 9⅞ | Standard Oil of Nebraska | 188,403 | $25 | .... | 6-20-34 | .50 | 16⅞ | 8¼ | 20½ | 11 |
| 19¾ | 11½ | 1,200 | 14½ | 14½ | 14½ | Standard Oil of Ohio | 753,740 | $25 | .... | 1-3-33 | .... | 28½ | 12¼ | 41 | 15½ |
| 1¼ | ⅞ | 1,500 | 1¼ | 1⅛ | 1⅛ | Sunray Oil | 1,610,810 | $1 | .... | 4-15-31 | .... | 2 | ⅛ | 1½ | ¼ |
| 6⅞ | 5 | 400 | 5⅞ | 5⅝ | 5½ | Texon Oil & Land | 336,028 | N.P. | 15cQ | 6-29-35 | .90 | 11 | 4⅝ | 13¾ | 6¼ |

*Ex-dividend. †Plus extras. ‡Payable in Canadian funds. §Includes 50 cents on old $25 par value stock. ‖Payable in preferred stock.

Note—In comparing highs and lows for the several years in the two tables, it will be necessary to take into consideration cases where there have been stock split-ups.

# PRICES ON REFINED PRODUCTS

All quotations f.o.b. plant in cars for interstate or export movement except as otherwise noted

Prices as of August 6, 1935

The following quotations are exclusive of the federal excise taxes of 1 cent a gallon on gasoline and 4 cents on lubricating oils.

## Refinery Gasoline

OKLAHOMA (Group 3)—
U. S. Motor grades:
Below 63 octane ..... .04¾ .04¾
63-70 octane ..... .05¾ .05¾
60-62 400 grade:
Below 63 octane ..... .04¾ .04¾
63-70 octane ..... .05¾ .05¾
64-66 375 ..... .04¾ .05
68-70 360 ..... .05 .05¼

NORTH TEXAS—
U. S. Motor grades:
Below 63 octane ..... .04¾ .04¾
63-70 octane ..... .05¾ .05¾
60-62 400 ..... .04¾ .04¾
64-66 375 ..... .04¾ .05

NORTH LOUISIANA (Ark., N. La. and Miss. delivery)—
U. S. Motor grades:
Below 63 octane ..... .05⅛
63-70 octane ..... .06¼
60-62 400 ..... .05⅛

ARKANSAS (Ark., N. La., Miss. del.)—
U. S. Motor grades:
Below 63 octane ..... .05⅛
63-70 octane ..... .06⅛

CHICAGO (based on Group 3)—
U. S. Motor grades:
Below 63 octane ..... .04¾ .04⅞
63-70 octane ..... .05½ .05¾
60-62 400 ..... .04¾ .04⅞
64-66 375 ..... .04⅞ .05
68-70 360 ..... .05 .05¼
Aviation fighting grade ..... .05¾ .06

PENNSYLVANIA (inland refineries)—
58-60 U. S. Motor:
Below 60 octane ..... .05⅞ .06
60-64.9 ..... .06⅝ .06¾
65-70 octane ..... .06⅞ .07
64-66 375 ..... .06¼ .06½
68-70 350 ..... .06⅝ .06½

CALIFORNIA (domestic movement)—
54-58 U. S. Motor ..... .04¼ .05¼
58-60 400 ..... .05 .06

EAST COAST—
U. S. Motor, below 60 octane:
*New York (Bayonne) ..... .05¾
Baltimore ..... .05¾
U. S. Motor, 60-64.9 octane:
*New York (Bayonne) ..... .06
Philadelphia ..... .06
Boston ..... .06
Baltimore ..... .06
Charleston, S. C. ..... .06
U. S. Motor, 65 and above:
*New York (Bayonne) ..... .06¼
Philadelphia ..... .06¼ .06½
Boston ..... .06¼
Baltimore ..... .06¼
Charleston, S. C. ..... .06½

*All grades of gasoline one-fourth cent less for small barge shipments.

GULF COAST (domestic)—
U. S. Motor grades:
Below 60 octane ..... .05 .05¼
60-64.9 ..... .05¼ .05⅜
65 octane and higher ..... .05½

## Naphtha

PENNSYLVANIA (inland refineries)—
50-52 450 (blending) ..... .05¾ .05⅞
52-54 450 (blending) ..... .05¾ .05⅞
54-56 450 (blending) ..... .05⅞ .06

CHICAGO (based on Group 3)—
50-52 450 (blending) ..... .04¾ .05
Cleaners' naphtha, 56-58 gr., 200 i.b.p., 320 e.p. ..... .06⅝ .07
Lacquer diluent, 180 i.b.p., 250 e.p. ..... .07⅝ .08
Lacquer diluent, 140 i.b.p., 200 e.p. ..... .08⅛ .09
Rubber solvent, 68-70 gr., 100 i.b.p., 300 e.p. ..... .06⅝ .07
Stoddard solvent, 300 i.b.p., 410 e.p., over 32° flash ..... .06⅝ .06½
Pet. thinner, 290-300 i.b.p., 410 e.p., over 32° flash ..... .06⅝ .06½
V.M.&P. naphtha, 56-58 gr., 190-200 i.b.p., 330 e.p. ..... .06⅝ .07
Petroleum spirits ..... .05⅝ .06

## Natural Gasoline

OKLAHOMA (Group 3)—
Grade 26-70 ..... .03¾
Grade 18-55 ..... .04 .04⅛
Low vapor pressure grade:
14 lb. v.p. (max.) ..... .04½ .04⅝
12 lb. v.p. (max.) ..... .04⅝ .05

NORTH LOUISIANA (Ark., N. La. and Miss. delivery)—
Grade 26-70 ..... .03½

NORTH TEXAS—
Grade 26-70 ..... .03 .03¼
Grade 18-55 ..... .03⅜ .04⅛
Low vapor pressure grade:
14 lb. v.p. (max.) ..... .04⅜ .04½
12 lb. v.p. (max.) ..... .04⅝ .05

CALIFORNIA—
75-85 375-390 ..... .04⅝ .05½

## Kerosene

(All kerosene water white)

OKLAHOMA (Group 3)—
41-43 ..... .03⅜ .03½
42-44 ..... .03½ .03¾

NORTH TEXAS—
41-43 ..... .03¼

NORTH LOUISANA (Ark., N. La. and Miss. delivery)—
41-43 ..... .03¾

ARKANSAS (Ark., N. La., Miss. del.)—
41-43 ..... .03¾

PENNSYLVANIA (inland refineries)—
45 ..... .04⅝ .04¾
46 ..... .04¾ .04⅞
47 ..... .04⅞ .05

CHICAGO (based on Group 3)—
41-43 ..... .03¼ .03⅝
42-44 ..... .03⅝ .03½

CALIFORNIA (Pac. Coast market)—
38-40 high burning test ..... .03¼ .04½

NEW YORK (Bayonne, N. J.)—
41-48 ..... .04⅜ .05

GULF COAST (domestic)—
41-43 ..... .04¼ .04½

## Petroleum Coke

(Prices per ton f.o.b. refineries in Chicago area. Refineries absorb freight to 80 cents a ton.)

| | |
|---|---|
| Pile run | 6.00 |
| Direct from still | 7.00 |
| Egg, nut, pea | 8.00 |
| Lump | 8.50 |

## Furnace Oil

OKLAHOMA (Group 3)—
No. 1 prime white, 38-42 ..... .03 .03¼
No. 1 straw, 38-40 ..... .02⅝ .03⅛
No. 2 straw, 32-36 ..... .02⅝ .03
No. 2 dark, 32-36 ..... .02⅝ .02⅞
No. 3, 28-32 ..... .02½ .02⅝
No. 3, 15 and above, 28-32 ..... .02⅝ .02½

NORTH TEXAS—
No. 1 prime white, 38-42 ..... .03 .03¼
No. 1 straw, 38-40 ..... .02⅝ .03⅛

NORTH LOUISIANA (Ark. N. La. and Miss. delivery)—
No. 2, 32-36 ..... .03⅛ .03¼

ARKANSAS (Ark., N. La., Miss. del.)—
No. 2, 32-36 ..... .03½
No. 3, 28-32 ..... .03¼

CHICAGO (based on Group 3)—
No. 1 prime white, 38-40 ..... .02⅝ .03
No. 1 straw, 38-40 ..... .02¾ .02⅞
No. 2 straw, 32-36 ..... .02⅝ .02¾
No. 2 dark, 32-36 ..... .02½ .02⅝
No. 3, zero to 15, 28-32 ..... .02⅜ .02½
No. 3, 15 and above, 28-32 ..... .02½ .02¼

NEW YORK ((Bayonne, N. J.)—
No. 1 ..... .04⅜ .05
No. 2 ..... .03⅝ .04
No. 4 ..... .03½ .03⅝

## Gas Oil and Fuel Oil

(Gas oil per gal., fuel oil per bbl.)

OKLAHOMA (Group 3)—
U.G.I. gas oil ..... .02½ .02⅝
No. 4, 24-28 ..... .87½ .90
No. 4, 15 and above, 24-28 ..... .75 .80
No. 5 ..... .70 .75
No. 6 ..... .67½ .70
Below 18 fuel oil, industrial .. .65 .67½

NORTH TEXAS—
U.G.I. gas oil ..... .02½ .02⅝
No. 4, 24-28 ..... .87½ .90
No. 5 ..... .72½ .75
No. 6 ..... .67½ .70
Below 18 fuel oil, industrial .. .65 .67½

NORTH LOUISIANA (Ark., N. La. and Miss. delivery)—
U.G.I. gas oil ..... .02⅝ .02¾
10-14 fuel oil, industrial ..... .75 .80

ARKANSAS (Ark., N. La., Miss. del.)—
10-14 fuel oil, industrial ..... .60 .65

CHICAGO (based on Group 3)—
U.G.I. gas oil ..... .02¼ .02⅛
No. 4, 24-28 ..... .85 .90
No. 4, 15 and above, 24-28 ..... .72½ .77½
No. 5, 18-22 ..... .65 .70
No. 6, 10-16 ..... .55 .60

Fuel oils of more than 40 cold test generally 5 to 15 cents per bbl. in these areas.

PENNSYLVANIA (inland refineries)—
36-40 ..... .04¼ .04⅝

CALIFORNIA—
Los Angeles:
30-34 gas oil, per bbl. .....1.05 1.35
27 plus Diesel .....1.05 1.25
27 plus Diesel (bunkers) .....1.25 1.30
12-16 (bunkers at tidewater) .. .87 .95
10-16 (cargo lots) ..... .75 .92
12-17 (tank cars) ..... .60 .95
San Joaquin Valley:
10-18 (tank cars) ..... .55 .75
San Francisco:
27 plus Diesel, per bbl. .....1.25
27 plus Diesel (bunkers) .....1.35
10-16 (bunkers) .....1.00

GULF COAST—
28-30 gas oil ..... .03½ .03⅝
28-30 Diesel (bunkers) .....1.70
Bunker C (bulk cargoes) ..... .85 .90
Bunker C (bunkers) ..... .95 1.00

NEW YORK (Bayonne, N. J.)—
27 plus, gas oil ..... .04
28-30 Diesel (lighterage 6½ cents per bbl.) .....1.65
28-30 Diesel (tank cars) ..... .04
*Bunker C (to ocean-going ships in N. Y. harbor) .....1.05
Industrial fuel (tank cars) ..... .03⅝

*Lighterage charge 5 cents per barrel additional.

## Neutral Oil

(Vis. at 100° F. except Pennsylvania and color N.P.A.)

OKLAHOMA (Group 3)—
Zero to 10 Cold Test:
150-3 ..... .10
180-3 ..... .11¼
180-4 ..... .10¾
200-3 ..... .11¾
200-4 ..... .11¼
240-3 ..... .13⅜
240-4 ..... .13¼
280-3 ..... .14⅜
280-4 ..... .14
300-3½ ..... .15¼
400-4 ..... .17¼
100-2 paraffin oil ..... .05¾
15-20 Cold Test:
200-3 ..... .10⅜
200-4 ..... .10¼
240-3 ..... .12⅜
240-4 ..... .12¼
280-3 ..... .13⅜
280-4 ..... .13

GULF COAST—
Pale Oils:
200-3 ..... .07 .07½
300-3 ..... .07½ .08
500-3½ ..... .08½ .09
750-3½ ..... .09 .09¼
1,200-3½ ..... .09½ .09⅝
2,000-4 ..... .09⅝ .10
Red Oils:
200-5-6 ..... .07 .07¼
300-5-6 ..... .07¼ .07½
500-5-6 ..... .08 .08⅛
750 ..... .08⅛ .09
1,200-5-6 ..... .09¼ .09½

CALIFORNIA (moving to dom. market)
Pale Oils:
100-2½-3 ..... .07½ .07¾
200-2½-3 ..... .08 .08⅜
300-3-3½ ..... .09 .10
350-3-4 ..... .10½ .11
400-3-4 ..... .12 .12¼
450-3-4 ..... .12½ .12⅝
550-3-4 ..... .13 .13½
600-3-4 ..... .13½ .14
Red Oils:
200-4-5 ..... .08⅛ .09
300-5-6 ..... .09
350-5-6 ..... .10 .10¼
400-5-6 ..... .10½ .10⅝
450-5-6 ..... .11 .11¼
500-5-6 ..... .11½ .11⅝
600-5-6½ ..... .12 .12⅝
700-6½ plus ..... .13 .13¼
750-6½ plus ..... .13½ .13⅝
900-6½ plus ..... .14 .14½

PENNSYLVANIA—
150 vis. at 70° F., color, 400-405 flash:
Zero pour test ..... .21½ .22
10 pour test ..... .20½ .21
15 pour test ..... .19 .19½
25 pour test ..... .17½ .18
180 vis., at 70° F., 3 color:
20 pour test ..... .21 .21½
200 vis. at 70° F., 3 color:
Zero pour test ..... .25½ .26
10 pour test ..... .24½ .25
15 pour test ..... .24 .24½
25 pour test ..... .23 .23½

## Bright and Steam Refined

OKLAHOMA (Group 3)—
Bright Stocks:
190-200 D ..... .18
150-160 D, 6-10 ..... .15
150-160 D, 10-25 ..... .14½
150-160 25-40 ..... .14
150-160 E ..... .14
Steam refined:
630 green (treated) ..... .09½
600 light green, untreated ..... .08½
600 dark green, untreated ..... .05 .06

PENNSYLVANIA—
Bright Stocks (Pennsylvania grade, No. 8 color, 145-50 at 510; 540-550 flash):
10 pour test ..... .20 .20½
15 pour test ..... .19 .19½
20 pour test ..... .18 .18½
25 pour test ..... .17 .17½
Steam refined:
600 ..... .09½ .10
650 ..... .11 .11½
600 Pennsylvania flash ..... .12 .12½
630 flash ..... .17 .17½
600 Warren E filtered ..... .13 .13½

## Wax and Petrolatum

(Prices per pound)

OKLAHOMA (Group 3)—
124-126 (a.m.p.) w.c. scale .... .02 .02½

PENNSYLVANIA (inland refineries)—
122-124 (a.m.p.) w.c. scale .... .0210 .0215
124-126 (a.m.p.) w.c. scale .... .0215 .0220

NEW YORK—
Wax in bags fully refined:
123-125 (a.m.p.) wax ..... .0420
125-127 (a.m.p.) wax ..... .0430
128-130 (a.m.p.) wax ..... .0455
130-132 (a.m.p.) wax ..... .0470
133-135 (a.m.p.) wax ..... .0530
135-137 (a.m.p.) wax ..... .0555
124-126 (a.m.p.) w.s. ..... .0200 .0210
124-126 (a.m.p.) y.s. ..... .0200 .0205
Petrolatum in barrels, carload lots:
Dark green ..... .01⅞
Amber ..... .02⅞ .03
Extra amber ..... .03 .03⅛
Lily white ..... .06⅝ .06¾
Snow white ..... .07¾ .07⅞
Cream ..... .05⅝ .05¾

CHICAGO (f.o.b. switching district)*—
122-124 (a.s.t.m.) wax ..... .0440 .0450
125-127 (a.s.t.m.) wax ..... .0465 .0475
127-129 (a.s.t.m.) wax ..... .0480 .0490
130-132 (a.s.t.m.) wax ..... .0540 .0550
132-134 (a.s.t.m.) wax ..... .0565 .0575

*Carload lots in burlap bags of approximately 225 pounds. Add 3° for a.m.p.

## Export Prices

### GASOLINE

GULF COAST—
U. S. Motor ..... .04⅞
60-62 400 ..... .04⅝ .05
61-63 390 ..... .04⅝ .05
64-66 375 ..... .05⅛ .05¼

LOS ANGELES—
U. S. Motor grades:
53-55 octane ..... .04
55-65 octane ..... .04 .04¼
65-67 octane ..... .04¼ .04½
67-69 octane ..... .04½ .04⅝
Above 69 octane ..... .04⅝ .05
58-60 400 endpoint ..... .04½ .05

### KEROSENE

GULF COAST—
41-43 prime white ..... .03⅞
41-43 water white ..... .03⅞ .04
44 water white ..... .04¼

LOS ANGELES—
41-43 water white ..... .04¼ .04⅝

### LUBRICANTS

NEW YORK (f.a.s. in bbls.)—
Cylinder Stocks:
600 Warren E ..... .20
600 S.R. unfiltered ..... .16½ .17
650 S.R. unfiltered ..... .18
600 flash S.R. ..... .19 .19½
630 flash S.R. ..... .24 .24½
Bright Stocks:
8 color ..... .24
6½ plus colors in dilution ..... .23

### NEUTRAL OIL

200-3 color ..... .28 .30
150-3 color ..... .23 .25

### PARAFFIN WAX

NEW YORK (prices per pound)—
123-125 a.m.p. ..... .03625
125-127 a.m.p. ..... .0375
128-130 a.m.p. ..... .0400
130-132 a.m.p. ..... .0425
133-135 a.m.p. ..... .0475
135-137 a.m.p. ..... .05
Crude scale:
124-126 w.s. ..... .0200 .0205
124-126 y.s. ..... .019 .02

# RETAIL OIL MARKETS

Tank wagon and filling station prices on gasoline and kerosene furnished by the larger marketing firms

Prices as of August 6, 1935

### Taxes

The gasoline quotations given in the following tables include the 1-cent federal tax, as well as state, county and city taxes. The gasoline is the regular or standard grade. In most areas a third grade and a premium grade are also available.

### Discounts

Under the standard form of commercial consumer contract which went into effect March 1, 1934, save in California, Oregon, Washington, Arizona and Nevada, a discount of 1 cent a gallon off tank wagon or 2 cents a gallon off retail prices is permitted for purchases between 4,000 and 10,000 gallons per month, or 4 cents a gallon off retail prices for purchases in lots of more than 10,000 gallons a month. The minimum delivery is 25 gallons.

### Standard Oil Co. (Indiana)

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wag. | Serv. sta. | Inc. tax | tank wag. |
| Chicago | 15.5 | 17.5 | 4.0 | 9.8 |
| Decatur, Ill. | 15.5 | 16.5 | 4.0 | 9.8 |
| E. St. Louis | 15.2 | 17.2 | 4.0 | 9.5 |
| Joliet | 15.5 | 17.5 | 4.0 | 9.8 |
| Peoria | 15.5 | 15.5 | 4.0 | 9.8 |
| Quincy | 15.3 | 17.3 | 4.0 | 9.6 |
| Davenport, Ia. | 15.5 | (†) | 4.0 | 9.8 |
| Des Moines | 15.3 | (†) | 4.0 | 9.6 |
| Mason City | 15.7 | (†) | 4.0 | 10.0 |
| Sioux City | 15.5 | (†) | 4.0 | 9.8 |
| Duluth, Minn. | 16.3 | 18.3 | 4.0 | 10.6 |
| Mankato | 15.9 | 15.9 | 4.0 | 10.2 |
| Minneapolis | 15.9 | 15.9 | 4.0 | 10.2 |
| LaCrosse, Wis. | 16.9 | 18.9 | 5.0 | 10.2 |
| Green Bay | 17.2 | 19.2 | 5.0 | 10.5 |
| Milwaukee | 15.3 | 16.8 | 5.0 | 10.1 |
| Madison | 16.9 | 18.9 | 5.0 | 10.2 |
| Detroit, Mich. | 15.2 | 16.7 | 4.0 | 9.3 |
| Grand Rapids | 16.6 | 18.6 | 4.0 | 10.5 |
| Saginaw | 16.8 | 18.8 | 4.0 | 9.3 |
| Evansville, Ind. | 17.2 | 19.2 | 5.0 | 10.3 |
| Indianapolis | 17.4 | 19.4 | 5.0 | 10.5 |
| South Bend | 17.6 | 19.6 | 5.0 | 12.0 |
| Fargo, N. Dak. | 16.9 | 18.9 | 4.0 | 11.2 |
| Huron, S. Dak. | 17.4 | 19.4 | 5.0 | 10.7 |
| Sioux Falls | 16.9 | 18.9 | 5.0 | 10.2 |
| Kan. City, Mo.* | 14.9 | 16.9 | 4.0 | 9.2 |
| Springfield | 14.6 | 16.6 | 4.0 | 8.9 |
| St. Louis | 15.2 | 17.2 | 3.5 | 9.5 |
| St. Joseph* | 14.9 | 16.9 | 4.0 | 9.2 |
| Wichita, Kans. | 14.4 | 15.0 | 4.0 | 8.3 |
| Bartlesville, Ok. | 16.0 | 18.0 | 5.0 | 8.8 |

*State tax 2 cents, 1-cent city tax and 1-cent federal tax.

†Standard Oil Co. (Indiana) has leased all service stations in Iowa.

Discounts to dealers: Undivided accounts, 1½ cents on premium and regular and 2½ cents on third grade off service station prices; divided accounts one-half cent less than undivided. Discounts to dealers in metropolitan Chicago one-half cent larger than rest of Standard of Indiana territory, namely 4 cents and 3 cents on respective grades. Where prices are more than 1 cent below normal, the discounts are one-half cent less than above.

### Stanolex Furnace Oil in Chicago

Effective June 27, 1935, f.o.b. Chicago tank wagon prices: Range oil, less than 100 gallons, 8.5 cents; 100-149 gallons, 7.5 cents; 150 gallons and more, 7.0 cents. No. 1 (36-40 lt. stw. zero), less than 100 gallons, 8.5 cents; 100-149 gallons, 7.5 cents; 150 gallons or more, 7.0 cents; No. 2 (30-34, stw. zero), same prices and quantities as No. 1; No. 3 (22-26, zero), less than 150 gallons, 7.2 cents; 150 gallons or more, 6.2 cents. No. 4 (12-16 zero), less than 400 gallons, 7.2 cents; 400 gallons or more, 6.2 cents, viscosity of No. 4, 85 and 100° F.; No. 5, less than 400 gallons, 5⅝ cents; 400 gallons or more 4⅝ cents.

### Rocky Mountain District

CONTINENTAL OIL CO.

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wag. | Serv. sta. | Inc. tax | tank wag. |
| Denver, Colo. | 18.0 | 20.0 | 5.0 | 11.0 |
| Pueblo | 18.0 | 20.0 | 5.0 | 13.0 |
| Grand Junction | 20.5 | 22.5 | 5.0 | 15.0 |
| Casper, Wyo. | 18.5 | 20.5 | 5.0 | 13.5 |
| Cheyenne | 18.5 | 20.5 | 5.0 | 13.0 |
| Butte, Mont. | 21.0 | 23.0 | 5.0 | 17.5 |
| Billings | 18.5 | 20.5 | 5.0 | 16.5 |
| Helena | 21.0 | 23.0 | 5.0 | 17.5 |
| Great Falls | 20.5 | 22.5 | 5.0 | 17.5 |
| Salt Lake, Utah | 21.0 | 23.0 | 5.0 | 16.0 |
| Twin Falls, Ida. | 23.0 | 25.0 | 6.0 | 18.0 |
| Boise | 23.5 | 24.5 | 6.5 | 18.0 |
| Albu'que, N. M. | 20.0 | 22.0 | *6.5 | 13.0 |

*One-half cent city tax.

Discount to dealers with or without contract throughout Continental territory: Undivided dealer discount off service station price, 4 cents; divided dealer accounts, 3½ cents.

### Southern District

STANDARD OIL CO. OF KENTUCKY

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wag. | Serv. sta. | Inc. tax | tank wag. |
| Atlanta, Ga. | 19.0 | 21.0 | 7.0 | 12.0 |
| Augusta | 19.0 | 20.0 | 7.0 | 13.0 |
| Macon | 19.5 | 21.0 | 7.0 | 13.0 |
| Savannah | 18.5 | 20.5 | 7.0 | 14.0 |
| Birm'ham, Ala. | 21.0 | 23.0 | 8.0 | 12.0 |
| Mobile | 20.0 | 22.0 | 8.0 | 11.0 |
| Montgomery | 22.0 | 24.0 | 8.0 | 13.5 |
| Jackson, Miss. | 19.0 | 21.0 | 7.0 | 11.0 |
| Vicksburg | 18.5 | 20.0 | 7.0 | 12.0 |
| Jacksonville, Fla. | 18.5 | 20.5 | 8.0 | 11.5 |
| Miami | 18.5 | 20.5 | 8.0 | 13.5 |
| Pensacola | 18.5 | 20.5 | 8.0 | 11.5 |
| Tampa | 18.5 | 20.5 | 8.0 | 12.5 |
| Lexington, Ky. | 19.5 | 21.5 | 6.0 | 10.0 |
| Covington, | 18.0 | 20 0 | 6.0 | 11.5 |
| Louisville | 18.5 | 20.5 | 6.0 | 10.0 |
| Paducah | 18.5 | 20.5 | 6.0 | 10.0 |

In addition to the state tax of 6 cents Montgomery, Ala., has a county tax of 1 cent per gallon and a city tax of 1 cent per gallon on gasoline, and one-half cent per gallon on kerosene. Mobile and Birmingham, Ala., each have a city gasoline tax of 1 cent per gallon. Pensacola, Ala., has a city gasoline tax of 1 cent.

### Southwestern District

MAGNOLIA PETROLEUM CO.

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wag. | Serv. sta. | Inc. tax | tank wag. |
| Dallas, Tex. | 15.0 | 17.0 | 5.0 | 7.0 |
| Fort Worth | 15.0 | 17.0 | 5.0 | 7.0 |
| Houston | 15.0 | 17.0 | 5.0 | 8.0 |
| San Antonio | 16.0 | 18.0 | 5.0 | 8.0 |
| El Paso | 15.0 | 17.0 | 5.0 | 10.0 |
| Muskogee, Ok. | 16.0 | 18.0 | 5.0 | 8.0 |
| Okla. City | 16.0 | 18.0 | 5.0 | 8.0 |
| Tulsa | 16.0 | 18.0 | 5.0 | 8.0 |
| Ft. Smith, Ark. | 14.5 | 18.0 | 5.0 | 8.0 |
| Little Rock | 17.0 | 20.5 | 7.5 | 9.5 |
| Texarkana | 15.5 | 17.5 | 5.0 | 8.0 |

### Atlantic Coast District

STANDARD OIL CO. OF NEW JERSEY

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wag. | Serv. sta. | Inc. tax | tank wag. |
| Atl'tic City, N. J. | 14.0 | 17.5 | 4.0 | 9.0 |
| Newark | 13.2 | 16.8 | 4.0 | 7.5 |
| Annapolis, Md. | 14.8 | 18.3 | 5.0 | 10.0 |
| Baltimore | 14.3 | 17.8 | 5.0 | 8.5 |
| Cumberland | 15.8 | 19.3 | 5.0 | 12.7 |
| Wash'g'n, D. C. | 12.3 | 15 8 | 3.0 | 9.5 |
| Danville, Va. | 16.6 | 20.1 | 6.0 | 12.9 |
| Norfolk | 15.1 | 18 6 | 6.0 | 11.3 |
| Petersburg | 15.8 | 19.3 | 6.0 | 11.7 |
| Richmond | 15.8 | 19.3 | 6.0 | 11.7 |
| Roanoke | 16.8 | 20.3 | 6.0 | 12.9 |
| Charles'n, W. Va. | 15 0 | 18.5 | 5.0 | 12.6 |
| Parkersburg | 14.3 | 17.8 | 5.0 | 11.2 |
| Wheeling | 15.5 | 19 0 | 5.0 | 12.2 |
| Charlotte, N. C. | 17.5 | 20.5 | 7.0 | 13.5 |
| Hickory | 18.7 | 22.2 | 7 0 | 13.7 |
| Mt. Airy | 17.5 | 20.0 | 7.0 | 13.8 |
| Raleigh | 18.2 | 21.7 | 7 0 | 13.3 |
| Salisbury | 17.5 | 20.0 | 7.0 | 13.5 |
| Charleston, S. C. | 16.2 | 19.7 | 7.0 | 11.3 |
| Columbia | 18.0 | 21.5 | 7.0 | 13.2 |
| Spartanburg | 16.75 | 19.0 | 7.0 | 13.5 |

Tank wagon gasoline refers to dealer instead of retail prices.

Price basis to dealers: Undivided dealers at regular price less one-half cent. Discount for kerosene, 1 cent off tank wagon price for 25 gallons or more under contract (contract not necessary in Baltimore) except in New Jersey, where no discount (if necessary) is given.

### Nebraska

STANDARD OIL CO. OF NEBRASKA

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wag. | Serv. sta. | Inc. tax | tank wag. |
| Omaha | 17.9 | 19.9 | 6.0 | 10.1 |
| McCook | 18.6 | 20.6 | 6.0 | 10.8 |
| Norfolk | 18.3 | 20.3 | 6.0 | 10.5 |
| North Platte | 18 7 | 20.7 | 6.0 | 10.9 |
| Scottsbluff | 19.4 | 21.4 | 6.0 | 11.6 |

Note: Discounts to dealers; where service station gasoline prices are (maximum overall, including rent) as follows: Reliance, 2½ cents; Standard Red Crown, 3½ cents; Red Crown Ethyl, 3½ cents.

Where service station gasoline prices are below normal resellers' allowances are reduced one-half of the amount below normal, down to the following (minimum overall, including rent): Reliance, 2 cents; Standard Red Crown, 3 cents; Red Crown Ethyl, 3 cents. Discounts to consumers for tank wagon deliveries covered only by Standard Commercial Consumers Contract, effective January 1, 1935.

### Ohio

STANDARD OIL CO. OF OHIO

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wag. | Serv. sta. | Inc. tax | tank wag. |
| Ohio points | 17.0 | 19.0 | 5.0 | *12.5 |

*Includes state tax of 1 cent.

### Pacific Coast Territory

STANDARD OIL CO. OF CALIFORNIA

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wag. | Serv. sta. | Inc. tax | tank wag. |
| San Francisco | 16.5 | 18.5 | 4.0 | 11.5 |
| Los Angeles | 11.5 | 13.5 | 4.0 | 10.5 |
| Fresno, Calif. | 15.0 | 17.0 | 4.0 | 12.0 |
| Phoenix, Ariz. | 20.0 | 22.0 | 6.0 | ‡18.0 |
| Reno, Nev. | 19.0 | 21.0 | 5.0 | 13.0 |
| Portland, Ore. | 19.0 | 21.0 | 6.0 | 13.5 |
| Seattle, Wash. | 19.0 | 21 0 | 6.0 | 13.5 |
| Tacoma | 19.0 | 21.0 | 6.0 | 13.5 |
| Spokane | 22.0 | 24.0 | 6.0 | 16.5 |

*Retail prices posted by Standard Stations, Inc., a subsidiary.

†Prices are at company's plant or depots, as company does not operate stations. A 4-cent per gallon discount is given dealers and customers taking tank wagon lots except in Phoenix where discount is 1 cent.

‡Includes 5-cent state tax.

### Pennsylvania, Delaware and Part of New England

ATLANTIC REFINING CO.

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wag. | Serv. sta. | Inc. tax | tank wag. |
| Philadelphia, Pa. | 15.0 | 17.0 | 4.0 | 9.0 |
| Pittsburgh | 16.0 | 18.0 | 4.0 | 10 0 |
| Allentown | 15.5 | 17.5 | 4.0 | 9.0 |
| Erie | 15.0 | 17.0 | 4.0 | 9.0 |
| Scranton | 16.0 | 18.0 | 4.0 | 10.0 |
| Altoona | 16.0 | 18.0 | 4.0 | 10.0 |
| Dover, Del. | 15.5 | 17.5 | 4.0 | 10.0 |
| Wilmington | 15.5 | 17.5 | 4.0 | 10.0 |
| Springf'd, Mass. | 12 2 | 16 7 | 4.0 | 7.5 |
| Worcester | 13.3 | 14.8 | 4.0 | 7.5 |
| Hartford, Conn. | 13.3 | 15.8 | 5.0 | 7.0 |
| New Haven | 12.2 | 15.7 | 3.0 | 7.5 |
| Providence, R. I. | 12.0 | 13.5 | 3.0 | 7.0 |

Note—Tank wagon prices are those applicable to consumers purchasing lots of 100 or more gallons in one delivery.

### Central South District

STANDARD OIL CO. OF LOUISIANA

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wag. | Serv. sta. | Inc. tax | tank wag. |
| N. Orleans, La. | 17 5 | 21.0 | ‡8.0 | †13.5 |
| Baton Rouge | 16.5 | 20.0 | †7.0 | 11.5 |
| Alexandria | 17 5 | 21.0 | †*8.0 | 10.5 |
| Lafayette | 18.0 | 21.5 | 2*8.0 | 12.5 |
| Lake Charles | 18.0 | 21 5 | †*8.0 | 12.5 |
| Shreveport | 16.0 | 19.5 | †7.0 | 9.0 |
| Knoxville, Tenn. | 20.0 | 23.5 | 8.0 | 14.0 |
| Memphis | 18.0 | 21.5 | 8.0 | 11.0 |
| Chattanooga | 19.5 | 23.0 | 8 0 | 11.5 |
| Nashville | 19 0 | 22 5 | 8.0 | 12 0 |
| Bristol | 17 85 | 20.6 | 8.0 | 14.5 |

*Includes city tax of 1 cent.

‡Includes 2-cent parish tax. †Includes 1-cent parish tax.

Tank wagon gasoline refers to dealer instead of retail prices.

Price basis to dealers: Undivided dealers at dealer price less one-half cent.

Louisiana kerosene prices include 1-cent state tax.

### New York and New England

SOCONY-VACUUM CO., INC.

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Post deal | Serv. sta. | Inc. tax | tank wag. |
| Albany, N. Y. | 14.2 | 17.7 | — | — |
| *Met. New York | 15.05 | 19.3 | 5.0 | 7.25 |
| *Br'kl'n, Queens | 14.8 | 18.8 | 5.0 | 7.25 |
| Buffalo | 13.5 | 16.0 | 5.0 | 8.0 |
| Rochester | *14.75 | 18.0 | 5.0 | 8.5 |
| Syracuse | 14.5 | 18.0 | 5.0 | 8.5 |
| Boston, Mass. | 13.0 | 16.5 | 4.0 | 7.0 |
| Portland, Me. | 15.0 | 18.5 | 5.0 | 7.5 |
| Manch'ter, N. H. | 14.8 | 18.3 | 5.0 | 7.75 |
| Burlington, Vt. | 16.2 | 19.7 | 5.0 | 8.5 |

*Includes 2 per cent city sales tax.

### Canada*

Imperial 3-Star Gasoline

IMPERIAL OIL, LTD.

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wag. | Serv. sta. | Inc. tax | tank wag. |
| Hamilton, Ont. | 22.0 | 25.0 | 6.0 | 17.5 |
| Toronto, Ont. | 22.0 | 25.0 | 6.0 | 17.5 |
| Brandon, Man. | 30.3 | 32.3 | 7.0 | 21.3 |
| Winnipeg, Man. | 28.7 | 31.7 | 7.0 | 20.2 |
| Regina, Sask. | 30.0 | 33.0 | 7.0 | 21.5 |
| Saskatoon, Sask. | 32.8 | 35 8 | 7.0 | 24.3 |
| Edmonton, Alta. | 32.2 | 35.2 | 7.0 | 23.7 |
| Calgary, Alta. | 29.5 | 32.5 | 7.0 | 21.0 |
| Vancouver, B. C. | 27.0 | 30.0 | 7.0 | 24.0 |
| Montreal, Que. | 20.5 | 23.0 | 6.0 | 17.0 |
| St. John, N. B. | 26.0 | 30.0 | 8.0 | 19.5 |
| Halifax, N. S. | 26.0 | 30.0 | 8.0 | 19.5 |

*Imperial gallon used in Canada.

In maritime provinces all dealers get 4 cents off service station price. In all other provinces open dealers get 3 cents off service station price and 1 cent additional to 100 per cent accounts, except Montreal City where open dealers get 2½ cents off service station price with 1 cent additional to 100 per cent accounts.

### Naphtha

STANDARD OIL CO. (INDIANA)

| | Tank wagon* |
|---|---|
| Oleum spirits | 15.7 |
| V.M.&P. naphtha | 16.0 |
| Cleaners' naphtha | 15.0 |
| Stanisol | 15.0 |

*Prices include 3-cent Illinois tax, but not 1-cent federal tax nor 2 per cent retail occupational tax.

Prices f.o.b. Chicago. Each of above prices subject to discount of 1 cent per gallon for 150-gallon lots if covered by contracts.

## Retail Price Changes

Standard Oil Co. (Indiana) July 27 reduced station gasoline 1 cent in Mankato; July 31, reduced station and tank wagon gasoline 1 cent in Milwaukee.

Continental Oil Co. July 30 reduced tank wagon kerosene 1 cent in Denver.

Standard Oil Co. of Louisiana July 24 reduced tank wagon kerosene 1 cent in Baton Rouge.

## Crude Stocks Decline

Stocks of domestic and foreign crude petroleum at the close of the week ended July 20 totaled 316,276,000 bbls., according to data compiled by the Bureau of Mines. Compared with the previous week, this total represents a net decline of 769,000 bbls., comprising decreases of 533,000 bbls. in domestic crude stocks and 236,000 in foreign crude stocks.

Current reports for the week ended July 20 indicate that both crude oil production and runs to stills increased. Daily average production was about 2,800,000 bbls., or about 25,000 bbls. over the level of the previous week. Crude runs to stills increased from about 2,710,000 to 2,780,000 bbls. Daily average imports of crude oil declined from 111,000 to 65,000 bbls. The estimated daily average balance for the week ended July 20 was as follows (barrels): Production, 2,800,000; imports, 65,000; decrease in stocks, 110,000, equals runs to stills, 2,780,000; exports, fuel, and losses, 195,000.

### STOCKS OF CRUDE PETROLEUM, JULY 13 AND 20, 1935

(Barrels of 42 gallons)

| Grade of crude oil— | July 20, 1935 |
|---|---|
| Pennsylvania Grade | 4,950,000 |
| Other Appalachian | 958,000 |
| Lima-N. E. Indiana-Michigan | 1,245,000 |
| Illinois-S. W. Indiana | 11,673,000 |
| N. Louisiana and Arkansas | 10,461,000 |
| W. Texas and S. E. New Mex. | 31,238,000 |
| East Texas | 28,685,000 |
| Other Mid-Continent | 142,490,000 |
| Gulf Coast | 24,312,000 |
| Rocky Mountain | 27,376,000 |
| California | 29,734,000 |
| Domestic crude | 312,522,000 |
| Foreign crude | 3,754,000 |
| Total* | 316,276,000 |

*Represents approximately 98 per cent of total stocks in the United States, exclusive of producers' stocks.

## Chicago Area Market Situation Mixed

CHICAGO, Aug. 5.—A strong tank car market and continued spottiness in tank wagon and service station prices are still the prevailing characteristics of the gasoline situation here, going into the month which may prove to be the all-time record-breaker in demand. It is possible the firm tank car market is preventing retail disturbances from growing worse. At the same time the principal factor working against improvement in the refinery market is the uneven tank wagon and service station conditions.

A definite improvement in tone is reported in the tank car kerosene market, with offerings fewer and not so insistent.

Somewhat the same situation exists in the distillates.

General industrial operations are gradually pointing toward improvement. A little of this condition reflects itself in the heavy gas and fuel oil market, which is firmer than in some time.

Statistician conditions of lubricating oils are regarded by numerous persons in the trade to be showing betterment.

Wax is dull and in slack demand.

Solvents and naphthas have been holding their own quite well.

No change in petroleum coke.

# Crude Oil Prices

### Oklahoma, Kansas, North Central and East Central Texas

| | |
|---|---|
| Corsicana (heavy) (June 17, 1933) | .80 |
| East Texas | $1.00 |
| Other fields | (See gravity table) |

### West Texas

| | |
|---|---|
| Crane, Upton, Crockett, Howard, Glasscock, Mitchell (Sept. 29, 1933) | $ .70 |
| Ector, Winkler and Pecos Counties and Lea County, New Mexico (sept. 29, 1933) | .75 |
| Pecos County, Yates shallow Pool (Sept. 29, 1933)* | .65 |
| Jones and Fisher Counties* | (See gravity table) |

### South Central and Southwest Texas

(See note below table)

| | |
|---|---|
| Darst Creek | $ .87 |
| Mirando (June 29, 1935) | .75 |
| Luling (Sept. 29, 1933) | .75 |
| Pettus | 1.05 |
| Salt Flat | .87 |
| Lytton Springs (Sept. 29, 1933) | .95 |
| Duval County (Sept. 29, 1933) | .80 |
| Saxet (June 29, 1935) | .80 |

### North Louisiana and Arkansas

| | |
|---|---|
| Smackover, Ark. (all grades) | $ .70 |
| Tullos, Urania, La. (Jan. 13, 1934) | .87 |
| Nevada, Ark. (Sept. 29, 1933) | .60 |
| East El Dorado (Sept. 29, 1933) | .70 |
| Converse, La. (Mar. 17, 1934) | 1.03 |
| Elm Grove, La. (Sept. 29, 1933) | .75 |
| Holly, La. (Nov. 17, 1934) | 1.02 |
| Pleasant Hill, La. (Mar. 17, 1934) | 1.02 |
| Zwolle, La. (Mar. 17, 1934) | 1.02 |
| Champagnolle, Ark. (Mar. 17, 1934) | .81 |
| Lisbon, Ark (Mar. 17, 1934) | 1.03 |
| Stephens, Ark. (Sept. 29, 1933) | .70 |
| Urbana, Ark. (Mar. 17, 1934) | .60 |
| Other fields | (See gravity table) |

### Rocky Mountain States

| | |
|---|---|
| Ilex, light (Sept. 29, 1933) | $ .96 |
| Ilex, heavy (Sept. 29, 1933) | .90 |
| Florence, Colo. (June 17, 1933) | .80 |
| Fort Collins and Wellington, Colo. (June 17) | (See Salt Creek prices) |
| Big Muddy (Sept. 29, 1933) | $1.01 |
| Frannie, light (May 1, 1934) | .70 |
| Frannie, heavy (Sept. 29, 1933) | .62 |
| Salt Creek and LaBarge (Sept. 29, 1933) | (See Stanolind Mid-Continent price schedule) |
| Grass Creek, light (Sept. 29, 1933) | $1.18 |
| Grass Creek, heavy (Sept. 29, 1933) | .62 |
| Elk Basin (Sept. 29, 1933) | 1.18 |
| Rock Creek (Sept. 29, 1933) | 1.02 |
| Lance Creek (Dec. 16, 1932) | .92 |
| Hudson (June 2, 1931) | .65 |
| Lost Soldier (Sept. 30, 1933) | .88 |
| Hamilton Dome, all grades (Feb. 16, 1935) | .87 |
| Torchlight (Sept. 29, 1933) | 1.18 |
| Greybull (Sept. 29, 1933) | 1.18 |
| Pondera (Sept. 29, 1933) | 1.35 |
| Sunburst (July 19, 1935) | 1.20 |
| Cat Creek, Montana | 1.07 |
| Hogback (Sept. 29, 1933) | 1.11 |
| Lea County, N. Mex. (Sept. 29, 1933) | .75 |
| Maljamar (Sept. 29, 1933) | .70 |
| Artesia-Jackson (Dec. 1, 1933) | .75 |

### Gulf Coast

Grade A and Grade B specification discontinued by leading buyers. (See gravity table)

| | |
|---|---|
| Tomball (see note)* | $1.10 |
| Livingston (Sept. 29, 1933)† | 1.00 |
| Cleveland (Jan. 11, 1934) | 1.00 |
| Greta (Sept. 29, 1933) | .85 |
| Refugio, light | (See gravity table) |
| Refugio, heavy (June 29, 1935)‡ | .80 |
| Markham and High Island | (See Gulf Coast gravity table) |
| Conroe | (See Conroe gravity table) |
| Bosco, La. (Jan. 18, 1935)§ | $ .90 |

Note—Tomball, effective September 29, by Humble Oil & Refining Co. and October 2 by Magnolia Petroleum Co., and November 10 by Stanolind Crude Oil Purchasing Co.

*Greta posted by Texas Co. †Shell Petroleum Corp. ‡Refugio heavy by Humble Oil & Refining Co. Cleveland (Liberty County) posted by Magnolia Petroleum Co. §Bosco posted by Pure Oil Co.

### Middle Western States

OHIO OIL CO

| | |
|---|---|
| Lima (Feb. 1, 1935) | $1.15 |
| Illinois (Jan. 5, 1934) | 1.13 |
| Princeton, Ind. (Jan. 5, 1934) | 1.13 |
| Plymouth | Shut in |
| Midland, Mich. (Sept. 30, 1933)* | $1.02 |
| West Branch, Mich. | .86 |
| Oceana, Mich (Oct. 5, 1933) | .90 |
| Somerset, Ky. (May 20, 1935) | 1.13 |
| Western Kentucky (May 22, 1935) | 1.13 |

*Posted by Pure Oil Co. and Simrall Pipe Line Co. Producers Pipe Line Co. pays 5 cents per barrel over Pure Oil Co.'s posted prices. West Branch, Mich., posted by Simrall Pipe Line Co. Somerset, Ky., crude purchased by Ashland Refining Co. Ashland, Ky., and posted prices includes premium. Oceana posted by Old Dutch Refining Co. and Naph-Sol Refining Co.

### Eastern States

TIDE WATER PIPE CO.
(Effective July 16, 1935)

| | |
|---|---|
| Bradford, Pa. | $1.95 |
| Allegany, N. Y. | 1.95 |

SOUTH PENN OIL CO.
(Effective July 16, 1935)

| | |
|---|---|
| Pennsylvania Grade Oil in National Transit Lines (Bradford Field) | $1.95 |
| Pennsylvania Grade Oil in Southwest Pennsylvania Lines | 1.87 |
| Pennsylvania Grade Oil in Eureka Pipe Line lines | 1.62 |
| Pennsylvania Grade Oil in Buckeye Pipe Line lines | 1.52 |
| Corning Grade Oil in Buckeye Pipe Line Co.'s lines | 1.32 |

PENNZOIL CO.
(Effective July 16, 1935)

| | |
|---|---|
| Pennsylvania Grade Oil in National Transit Lines: | |
| Group A | $1.92 |
| Includes Cochran, Franklin, Hamilton and Doolittle districts. | |
| Group B | 1.91 |
| Includes Titusville district. | |
| Group C | 1.90 |
| Includes Turkey and Tidioute districts. | |
| Group D | 1.89 |
| Includes Bear Creek and Porkey districts. | |
| Group E | 1.86 |
| Includes Eldeneau, Bull Creek, Rough Run, Carbon, Dipner, Bredlin, McJunkin, Jameson, Kennerdell, Emlenton, Tiona, Lacey and Kinzua districts. | |

Price depends on length of pipe line haul to plant at Oil City.

PURE OIL CO
(Effective July 16, 1935)

| | |
|---|---|
| Cabin Creek, W. Va. | $1.62 |
| Bradford Hollow, W. Va. | 1.62 |
| Kelly Creek, W. Va. | 1.62 |

### Canada

| | |
|---|---|
| Ontario (Sept. 9, 1933): | |
| Petrolia* | $2.10 |
| Oil Springs | 2.17 |
| Turner Valley (May 21, 1934):† | |
| Clear naphtha | 2.55 |
| Discolored naphtha | 2.37 |
| Crude oil, 50 gravity | 2.19 |
| Crude oil, 45 to 49.9 | 2.07 |
| Crude oil, 40 to 44.9 | 1.50 |

*Imperial Oil, Ltd. †Imperial Oil, Ltd., and Regal Oil & Refining Co.

### Mexico

| | |
|---|---|
| Panuco* | $.965 |

*F.o.b. ship, based on May transactions and exclusive of production and export taxes and bar dues.

# Crude Oil Gravity Prices

| Gravity— | 1 Oklahoma and Kansas | 2 North Texas, Central Texas and East Central Texas | 3 North Louisiana and Arkansas | 4 Gray County, Texas | 5 Carson, Hutchinson and Moore Counties, Texas | 6 Conroe, Texas | 7 Salt Creek, Wyo. | 8 Gulf Coast, Texas and Louisiana | 9 Gulf Coast, Texas and Louisiana | 10 Cotton Valley, Louisiana |
|---|---|---|---|---|---|---|---|---|---|---|
| Below 20 | .... | .... | .... | .... | .... | .... | .... | $.82 | $.82 | .... |
| 20-20.9 | .... | .... | .... | .... | .... | .... | .... | .84 | .84 | .... |
| 21-21.9 | .... | .... | .... | .... | .... | .... | .... | .86 | .86 | .... |
| 22-22.9 | .... | .... | .... | .... | .... | .... | .... | .88 | .88 | .... |
| 23-23.9 | .... | .... | .... | .... | .... | .... | .... | .90 | .90 | .... |
| 24-24.9 | .... | .... | .... | .... | .... | .... | .... | .92 | .92 | .... |
| Below 25 | *$.76 | .... | .... | .... | .... | .... | .... | .... | .... | $.70 |
| 25-25.9 | *.78 | .... | .... | .... | .... | .... | .... | .94 | .94 | .72 |
| 26-26.9 | *.80 | .... | .... | .... | .... | .... | .... | .96 | .96 | .74 |
| 27-27.9 | *.82 | .... | .... | .... | .... | .... | .... | .98 | .98 | .76 |
| 28-28.9 | *.84 | .... | .... | .... | .... | .... | .... | 1.00 | 1.00 | .78 |
| Below 29 | .84 | $.79 | $.79 | .... | .... | .... | $.84 | .... | .... | .... |
| 29-29.9 | .86 | .81 | .81 | .... | .... | .... | .86 | 1.02 | 1.02 | .80 |
| 30-30.9 | .88 | .83 | .83 | .... | .... | .... | .88 | 1.04 | 1.04 | .82 |
| 31-31.9 | .90 | .85 | .85 | .... | .... | .... | .90 | 1.06 | 1.06 | .84 |
| 32-32.9 | .92 | .87 | .87 | .... | .... | .... | .92 | 1.08 | 1.06 | .86 |
| 33-33.9 | .94 | .89 | .89 | .... | .... | .... | .94 | 1.10 | 1.07 | .88 |
| 34-34.9 | .96 | .91 | .91 | .... | .... | .... | .96 | 1.12 | 1.08 | .90 |
| Below 35 | .... | .... | .... | $.79 | $.69 | .... | .... | .... | .... | .... |
| 35-35.9 | .98 | .93 | .93 | .81 | .71 | $1.09 | .98 | 1.12 | 1.09 | .92 |
| 36-36.9 | 1.00 | .95 | .95 | .83 | .73 | 1.11 | 1.00 | 1.12 | 1.10 | .94 |
| 37-37.9 | 1.02 | .97 | .97 | .85 | .76 | 1.13 | 1.02 | 1.12 | 1.11 | .96 |
| 38-38.9 | 1.04 | .99 | .99 | .87 | .77 | 1.15 | 1.04 | 1.12 | 1.12 | .98 |
| 39-39.9 | 1.06 | 1.01 | 1.01 | .89 | .79 | 1.17 | 1.06 | 1.12 | 1.13 | 1.00 |
| 40 and over | 1.08 | 1.03 | 1.01 | .91 | .81 | 1.19 | 1.08 | 1.12 | 1.14 | 1.02 |

# California Crude Oil Prices

### STANDARD OIL CO. OF CALIFORNIA

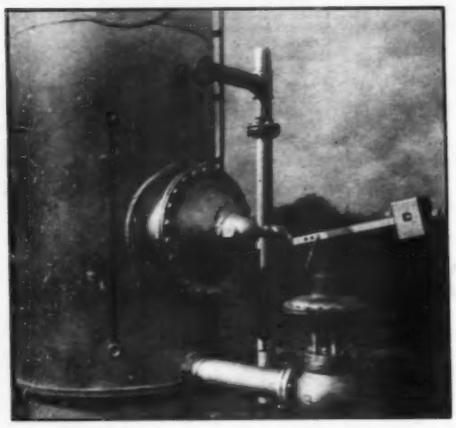
For current purchases of crude oil at the well (unless otherwise specified). (All gravities above these quoted take highest price offered in that field.)
(Effective September 6, 1933)

| Gravity— | Long Beach | Seal Beach, Alamitos Heights | Huntington Beach | Inglewood | Playa del Rey | Olinda, Brea Canyon | Athens-Rosecrans | Torrance | Richfield | Whittier, La Habra | Montebello | Santa Fe Springs La Habra-Coyote | | Midway-Sunset, Elk Hills, Buena Vista Hills | Lost Hills | Coalinga | Coyote | Mountain View | Elwood Terrace | Newhall, McKittrick, Kern River | Wheeler Ridge | Kettleman Hills | Shiells Canyon, South Mountain, Santa Paula |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14-14.9 | $.65 | $.65 | $.65 | $.65 | $.65 | $.65 | .... | $.65 | $.65 | $.65 | $.65 | .... | $.65 | $.57 | $.57 | $.57 | $.65 | $.57 | .... | $.57 | $.57 | .... | $.57 |
| 15-15.9 | .65 | .65 | .69 | .69 | .66 | .69 | .... | .66 | .65 | .65 | .65 | .... | .65 | .... | .... | .... | .65 | .57 | .... | .57 | .57 | .... | .57 |
| 16-16.9 | .66 | .65 | .72 | .73 | .69 | .73 | .... | .69 | .67 | .68 | .65 | .... | .65 | .... | .... | .... | .65 | .57 | .... | .57 | .57 | .... | .57 |
| 17-17.9 | .69 | .65 | .75 | .76 | .73 | .76 | .... | .72 | .70 | .71 | .65 | .... | .68 | .... | .... | .... | .68 | .57 | .... | .57 | .57 | .... | .57 |
| 18-18.9 | .72 | .65 | .78 | .80 | .76 | .79 | .... | .75 | .74 | .74 | .65 | .... | .71 | .61 | .61 | .69 | .71 | .57 | .... | .57 | .58 | .... | .60 |
| 19-19.9 | .75 | .65 | .81 | .83 | .80 | .82 | .... | .78 | .78 | .78 | .65 | .... | .74 | .64 | .65 | .62 | .74 | .57 | .... | .57 | .61 | .... | .63 |
| 20-20.9 | .78 | .68 | .83 | .87 | .83 | .85 | .... | .81 | .82 | .81 | .66 | .... | .78 | .67 | .69 | .65 | .78 | .58 | .... | .57 | .64 | .... | .66 |
| 21-21.9 | .81 | .72 | .86 | .90 | .87 | .88 | .... | .83 | .85 | .84 | .69 | $.72 | .81 | .70 | .73 | .68 | .81 | .59 | .... | .... | .67 | .... | .69 |
| 22-22.9 | .84 | .76 | .89 | .94 | .90 | .92 | .... | .85 | .89 | .87 | .72 | .76 | .84 | .73 | .76 | .72 | .84 | .61 | .... | .... | .70 | .... | .72 |
| 23-23.9 | .88 | .81 | .92 | .97 | .94 | .95 | $.83 | .89 | .92 | .90 | .76 | .79 | .87 | .77 | .79 | .75 | .87 | .63 | .... | .... | .73 | .... | .75 |
| 24-24.9 | .91 | .85 | .95 | 1.01 | .97 | .98 | .86 | .92 | .97 | .93 | .80 | .83 | .90 | .81 | .82 | .78 | .90 | .66 | .... | .... | .76 | .... | .78 |
| 25-25.9 | .94 | .89 | .98 | .... | 1.00 | 1.01 | .90 | .95 | 1.00 | .... | .85 | .87 | .93 | .85 | .85 | .81 | .93 | .69 | .... | .... | .79 | .... | .81 |
| 26-26.9 | .97 | .93 | 1.01 | .... | 1.04 | 1.04 | .94 | .98 | 1.04 | .... | .89 | .90 | .96 | .89 | .88 | .... | .96 | .72 | .... | .... | .... | .... | .84 |
| 27-27.9 | 1.00 | .98 | 1.04 | .... | .... | 1.07 | .97 | .... | 1.08 | .... | .... | .94 | .99 | .93 | .91 | .... | .99 | .75 | .... | .... | .... | .... | .88 |
| 28-28.9 | 1.03 | 1.02 | 1.07 | .... | .... | 1.10 | 1.01 | .... | 1.11 | .... | .... | .98 | 1.02 | .97 | .94 | .... | 1.02 | .78 | .... | .... | .... | .... | .92 |
| 29-29.9 | 1.06 | 1.05 | 1.09 | .... | .... | .... | 1.04 | .... | 1.15 | .... | .... | 1.01 | 1.05 | 1.01 | .97 | .... | 1.06 | .81 | .... | .... | .... | .... | .96 |
| 30-30.9 | 1.09 | 1.10 | 1.12 | .... | .... | .... | 1.08 | .... | .... | .... | .... | 1.05 | 1.09 | 1.05 | 1.00 | .... | 1.09 | .84 | .... | .... | .... | .... | 1.00 |
| 31-31.9 | .... | .... | .... | .... | .... | .... | 1.12 | .... | .... | .... | .... | 1.08 | 1.12 | 1.09 | .... | .... | 1.12 | .87 | .... | .... | .... | .... | .... |
| 32-32.9 | .... | .... | .... | .... | .... | .... | 1.15 | .... | .... | .... | .... | 1.12 | 1.15 | 1.13 | .... | .... | 1.15 | .90 | .... | .... | .... | .... | .... |
| 33-33.9 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.16 | 1.18 | 1.17 | .... | .... | 1.18 | .93 | 1.03 | .... | .... | .93 | .... |
| 34-34.9 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.19 | 1.21 | .... | .... | .... | 1.21 | .... | 1.06 | .... | .... | .96 | .... |
| 35-35.9 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.23 | .... | .... | .... | .... | .... | .... | 1.09 | .... | .... | .99 | .... |
| 36-36.9 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.26 | .... | .... | .... | .... | .... | .... | 1.12 | .... | .... | 1.02 | .... |
| 37-37.9 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.30 | .... | .... | .... | .... | .... | .... | 1.15 | .... | .... | 1.05 | .... |
| 38-38.9 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.34 | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.08 | .... |
| 39 and over | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.11 | .... |

# NEW OR IMPROVED EQUIPMENT

## B.S.&B. Valve Withstands Hard Usage in the Oil Field

Severe field tests have established the reputation of the B.S.&B. bottle-tight low-pressure pilot valve as a preventive of wasteful gas loss from low-pressure separators on high-ratio wells.



The valve, pioneered by Black, Sivalls & Bryson, Inc., Oklahoma City, is reported to have stood up against the terrific cutting on wells making 50 per cent sand. Two features are said to account for the success of the valve. It is single-seated and it operates stroke fashion.

A quick upward stroke raises its single plug high off its seat, allowing a smooth streamlined flow through its bowl. This greatly reduces the opportunity of sand to cut. A quick downward stroke drives the plug hard against its seat, where it is held bottle-tight by the combined pressure of the fluid and a powerful spring.

The entire mechanism of the B.S.&B. valve has been tested up to 300 pounds per square inch, twice its maximum rated pressure of 150 pounds.

The valve is operated by a simple rotary air-brake type of master valve which requires no packing, has only two moving parts and has a flat valve slide which keeps itself ground tight. Its long sharp port opens all at once to admit a full slug of gas to the diaphragm and closes all at once to exhaust it equally fast. Set screws regulate the length of the dump from the separator.

Repairs are made easily. Removal of four cap screws from the top flange of the valve bowl permits the plug to lift out the bonnet opening. The plug is provided with a resilient composition disc, durable under oil and sand cutting and easily renewed. The inserted valve seat can be unscrewed and replaced through the bonnet opening without unflanging the valve bowl.

## Here and There With Men Who Manufacture Equipment

Appointment of G. W. Daniel as manager of Mid-Continent and eastern sales and service for the Daniel Orifice Fitting Co., Los Angeles, is announced by Paul P. Daniel, president.

John Isaacs, assistant to the president of Vernon Tool Co., Ltd., Los Angeles, Calif., has returned from a three-month business trip during which he covered Texas, Oklahoma and Louisiana in the interests of the McNeely vibrating rotary mud screen manufactured by Vernon Tool Co.

Dr. Irving Langmuir, associate director of the General Electric Research Laboratory in Schenectady, N. Y., has been elected to foreign membership in the Royal Society, England, considered one of the highest honors that can be bestowed by British scientists on fellow workers in other countries and limited to 50 persons.

C. E. Mangold, formerly district manager for Dowell Incorporated in Shreveport, La., has been promoted to the general sales staff with headquarters in Tulsa. Mr. Mangold represented the company in Kentucky and Kansas before going to Shreveport. C. A. Prince succeeds Mr. Mangold.

Louis Brendel, formerly with Sutherland-Abbott, Inc., Boston, and Neilan Co., Los Angeles, has been made assistant sales manager of Hancock Valve Co., a division of Consolidated Ashcroft Hancock Co., Bridgeport, Conn.

Midco Tool & Supply Co., Oklahoma City and Ada, Okla., has been appointed exclusive distributor for Regan Forge & Engineering Co., handling the latter company's complete line of oil-field equipment in Oklahoma and Kansas.

A plant for the production and development of liquid cooled aircraft engines is to be built for Allison Engineering Co., division of the General Motors Corp., at Speedway, Indianapolis, Ind., under a contract awarded to Austin Co., Cleveland.

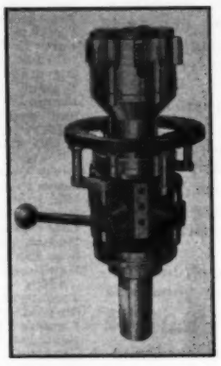
## *Men Widely Known in the Equipment Field*

ALFRED C. McAFEE

Alfred C. McAfee, who has had wide experience in the production division of the oil industry, has joined the sales staff of the Oil Center Tool Co., Houston, Tex. Mr. McAfee was educated at Texas A. and M. College and T.C.U., where he studied both geology and engineering. He worked in the engineering department of the Texas Company in 1919, and later in that company's geological department. He roughnecked for Loffland Brothers, scouted for Tide Water-Seaboard, and served in the production department of both Pure Oil Co. and Stanolind Oil & Gas Co.

## Extension Link Is Provided for Landis Collapsible Taps

In order to tap threads that are longer than provided for with standard taps, the Landis Machine Co., Waynesboro, Pa., has designed a special link for use between the body and the head of its style LT collapsible taps and style LM receding chaser collapsible taps. This construction is possible because on these taps the head is made detachable from the body to permit the use of several heads of different sizes on the same body.



The extension link is machined on one end and drilled and tapped to fit the tap body while the opposite end is prepared to fit the tap head. This permits using a standard body and a standard head instead of requiring the special manufacture of these parts. Any length of link can be provided for the length of thread desired.

This link can be used also on a tap required for reaching to the bottom of a deep hole even though a short length of thread is required. If a short length of thread is also to be tapped, the link can be removed and the head attached directly to the body, making a standard tap. The illustration shows a No. 6LT body with 7-inch head with link to provide a reach of 6½ inches for tapping straight through a special pipe coupling. Application to a style LM tap would be similar.

## Republic Steel Now Is Making New High-Tensile Product

Republic double-strength steel, a new high tensile steel product of Republic Steel Corp., Youngstown, Ohio, is a copper-nickel-molybdenum ferrous alloy with yield point and tensile strength sufficiently higher than ordinary carbon steel to permit the use of 30 to 40 per cent lighter sections without sacrificing of strength or safety factor. Corrosion-resistance and forming qualities are features of the new steel, which is made in two carbon ranges and is available in the usual commercial forms. It can be arc, gas or spot welded without loss of ductility at or adjacent to the weld. Cold forming tests are said to have shown the excellence of this alloy in point of ductility.

### Hydraulic Floor Jack

The Herb Smith Equipment Corp., Rochester, N. Y., announces a new 3-ton hydraulic floor jack, built for 1935 cars as well as all older models. It has a capacity of 6,000 pounds; weight 195 pounds; and lifts 4 to 24 inches. Features include self-cleaning release valve, safety by-pass valve inside of oil box, and safety release with release button positioned between the handle frames, making it impossible to trip accidentally.

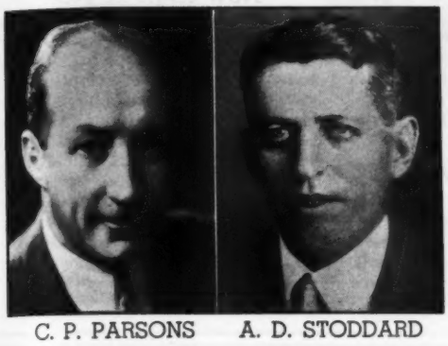
### Treatment of Burns

To help in giving prompt and effective treatment of burns DeVilbiss Co., Toledo, Ohio, has developed a special atomizer for applying tannic acid, a burn remedy recognized by industrial medical authorities. This atomizer offers speed and convenience in first-aid work by three features: A wide-mouthed bottle to facilitate filling, stirring and cleaning; acid and water levels clearly marked

on the bottle to make correct mixing easy; wide volume of soft spray giving quick and effective application over a wide area.

## Parsons and Stoddard Higher in Halliburton Organization

C. P. Parsons and A. D. Stoddard were made vice presidents of Halliburton Oil Well Cementing Co. at the recent annual meeting of stockholders. Mr. Parsons, who is manager of sales, joined the



C. P. PARSONS A. D. STODDARD

organization March 1, 1929, as field engineer. Previously he had been a district superintendent for Magnolia Petroleum Co., with 10 years' service in various oil fields. He served as an aviator in the World War. Mr. Stoddard, field engineer, joined the Halliburton organization March 2, 1926. Prior to that time he had been a consulting engineer in Bartlesville, Okla., and before that had been engaged in various phases of engineering. He served in the Engineering Corps during the World War.

## New Type of Gas Scrubber Is Developed by Fluor Corp.

A new simple, positive and economical type of gas cleaner or scrubber has been developed by the Fluor Corp., 909 East Fifty-ninth Street, Los Angeles, Calif. It is asserted by the manufacturer that this cleaner will remove over 99 per cent of the moisture and dirt in the gas stream.

The cleaner is available in two types. Sizes are predetermined by the volume of gas to be handled. Because of their simple construction and freedom of moving parts, they may be operated 24 hours a day, requiring no attention or service other than removal of water or dust which settles in the lower compartment. The frequency with which this is done is of course determined by the condition of the gas being cleaned.

The pressure drop in both the moisture and dust remover is small. There is a minimum amount of resistance to the passage of the gas from the time it enters the cleaner until it leaves.

## Bulletins, Booklets and Other Literature for the Trade

A 48-page catalog of Gates Vulco ropes and sheaves, available from the Gates Rubber Co., Denver, Colo., is, as its first cover page indicates, a "complete guide for selecting or designing V-belt drives." Care, maintenance, tension adjustment, service conditions, conversions, "flywheel effect," etc., are among subjects covered.

Interesting comments on various products and methods of the Edward Valve & Manufacturing Co., East Chicago, Ind., are contained in its current issue of "Valve Values."

Bulletins available from Worthington Pump & Machinery Corp., Harrison, N. J., include one on Worthington air-compressor units for oil and gas engine starting and one on Worthington horizontal duplex piston pumps for general service.

Timken Steel & Tube Co., Canton, Ohio, has issued a revised edition of its sheet listing "Timken Steel Specifications." In addition to the range of alloy and carbon steel listed under S.A.E. classifications, this specification sheet gives the specification for Krupp, Ni-Cr-V and the special corrosion and heat resisting steels produced by the Timken Steel & Tube Co.

"A Century and a Quarter in Iron and Steel," a 16-page booklet issued by Lukens Steel Co., Coatesville, Pa., presents an interesting story of the beginnings of the steel industry.

W. H. Nicholson & Co., 202 Oregon Street, Wilkes-Barre, Pa., are sending on request an eight-page bulletin on the Nicholson welded steel float (chromium-plated) and welded stainless steel float, for steam traps, water columns, float valves, liquid level controls, etc.

"Modern Blowout Prevention" is the title of an eight-page, two-color booklet of Cameron Iron Works, Houston, Tex. It presents the new Cameron "SDA" blowout preventer, which features improved packing methods and a much shorter preventer, with more powerful closing means.

More than 50 J-M insulating products, of which there is one for every temperature from 400° below zero at 2,500° F., are described and illustrated in a handy booklet entitled "Barriers to Industrial Waste" published by Johns-Manville, 22 East Fortieth Street, New York.

The Bucyrus-Armstrong 29-W drill, an all-steel wire-line machine capable of drilling to depths of 1,500 feet or more, starting 12 or 16-inch holes and carrying correspondingly larger diameters for shallower wells, is described and illustrated in a 16-page booklet which may be obtained by writing to Bucyrus-Erie Co., South Milwaukee, Wis.

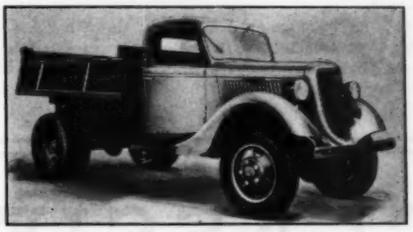
Linde Air Products Co., 30 East Forty-second Street, New York, announces "The Metallurgy of Oxy-Acetylene Welding of Steel." This booklet, by J. H. Critchett, vice president, Union Carbide & Carbon Research Laboratories, Inc., is an informative discussion of the physical and chemical principles involved in oxy-acetylene welding of steel.

An eight-page bulletin giving details concerning a new instrument which makes a continuous record of vapor pressure instantly available may be obtained from C. J. Tagliabue Manufacturing Co., Park and Nostrand Avenues, Brooklyn, N. Y.

## Ford V-8 Truck Is Made Into All-Wheel-Drive Unit

Marmon-Herrington has announced application of its all-wheel-drive principle of design and construction to the Ford V-8 truck. Specially designed driving front axle and propeller shaft, a two-speed auxiliary transmission and other necessary parts are installed, the remainder of the Ford V-8 truck being just as it comes from the factory.

The Marmon-Herrington Co. has started production on four models. Two are four-wheel-drive units. These are the B5-4, with wheelbase of 132 inches, and the B6-4, with wheelbase of 157½ inches. In addition two six-wheel-drive units are offered. The four-wheel drives have a maximum

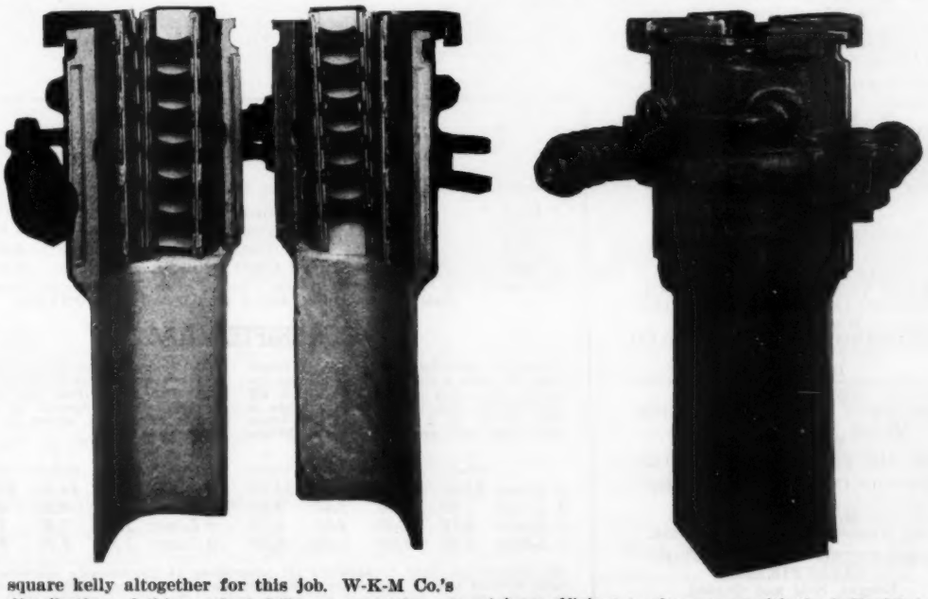


gross capacity of 13,200 pounds and the six-wheel drives a maximum gross capacity of 22,000 pounds.

The complete Marmon-Herrington line now includes 28 models ranging in gross capacity from 8,400 to more than 52,000 pounds. Seventeen of these models are four-wheel-drive vehicles, 12 with gasoline engines and five with Diesel engines. Eleven models are six-wheel-drive units of which seven have gasoline engines and four Diesel engines. Each model is engineered so that it can be manufactured in two or more wheelbase lengths and equipped with tires of two or more sizes. Thus a wide number of units is available, each fitting a definite purpose by giving the combination needed.

## Joint of Drill Pipe or Tubing Used as Kelly

W-K-M Co., Houston, Tex., is introducing a new piece of equipment which permits drilling-in the well with the use of a joint of drill pipe or tubing as the kelly, eliminating necessity of the



square kelly altogether for this job. W-K-M Co.'s distribution of this product follows acquisition of exclusive manufacturing and sales rights on the Hauser round kelly drive.

The smooth drill pipe or tubing joint is contacted and held by flexible, self-adjusting roller racks, which allow for misalignment. The racks provide a positive drive for rotation, yet are entirely "free-wheeling" upward or downward. An outstanding feature of this product is that it permits the closing of blowout preventer rams without requiring the raising of the entire drilling string sufficient to clear rams with the kelly joint. Each full length of pipe may be run without a shutdown. The round kelly drive also permits drilling in under pressure with oil, doing away with washing the well. The W-K-M-Hauser round kelly drive is available for 2-inch, 2½-inch, 3-inch and 4-inch tubing or drill pipe.

## Asphalt Mat Pavement for Kansas Roads

The possibilities of extending state highway systems, adding to secondary and farm-to-market roads, employment of relief labor and economical, utility expenditure of relief appropriations are revealed in the announcement of Evan Griffith, works progress administrator for Kansas, approving 39 highway projects to be financed from the $50,000,000 grant to the State.

Approximately 200 miles of heavy-duty bituminous mat pavement will be added to the Kansas highway system at an estimated cost of $5,000 a mile. Actual costs probably will be less than that figure when competitive bids are received early in August.

Of the 39 approved projects, the Low Cost Roads Association reports, more than half are for the heavy mat surfacing on both the main state highways and the farm-to-market system. Other projects include the elimination of railway grade crossings, laying of light type surfacing, grading and culvert installation. No high-cost type "luxury" pavements were included.

Employment will be provided for between 1,500 and 2,000 men on the relief rolls, the relief administrator said, and work should begin early in September.

"Kansas has become noted for its economical use of public funds," said G. E. Everett, secretary of the Low Cost Roads Association, "and its use of the relief appropriations provides a splendid illustration of the widespread benefits to be obtained through judicious allotment of its funds to the low-cost roads projects. The State will receive 200 miles of smooth, durable pavement, men will be put to work on utility projects which will serve the farms and motorists of the entire State.

"The investment in the lower cost highways will prove profitable long after the expiration of the work-relief campaign because the operating expenses — interest, depreciation and maintenance—of this type highway will easily be borne by the gasoline taxes and license fees on cars actually using them."

The Low Cost Roads Association has long advocated a policy of designing each highway for the traffic it will carry and limiting the cost to the income to be derived from gasoline taxes and license fees. The association today called the attention of highway engineers and commissioners to the Kansas relief program as an example of such a policy and a program of state-wide benefit.

## State Executives

CHICAGO, Aug. 5.—Oil marketing developments of interest to the jobbing trade were reviewed at a meeting of the State Executive Council, held July 30 at the Chicago Oil Men's Club. Elwin E. Hadlick of the Northwest Petroleum Association was elected chairman of the council, which is a group of officials of 13 middle western state oil marketing associations. He succeeds the late I. A. Archambault of the Illinois Petroleum Marketers Association. G. A. Primm of the Illinois association was made secretary-treasurer, succeeding Mr. Hadlick in that position.

## New High in Tax

State taxes on gasoline reached a new high total of $565,027,000 in 1934, and, added to federal gasoline taxes of $170,109,000, increased the cost of motor fuel by a grand total of $735,136,000. Reports of 1934 state gasoline tax collections, received from the U. S. Bureau of Public Roads, indicate that receipts from this source were roundly $47,000,000 higher than the $518,196,000 collections of 1933 and approximately $30,000,000 higher than the previous peak income, $536,397,000, collected in 1931.

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